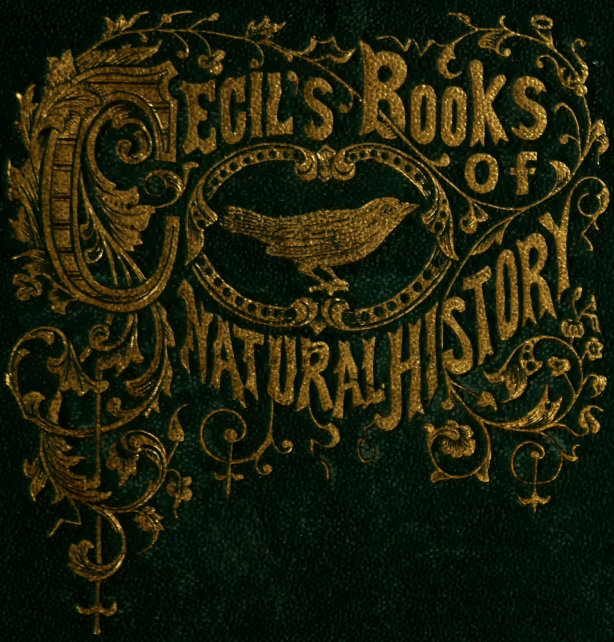
CECIL'S BOOKS OF
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UNITED STATES OF AMERICA.

THE FAIRY MARTIN. *Hirundo Ariel.*

CECIL'S BOOKS OF NATURAL HISTORY.

CECIL'S BOOK OF BIRDS.

1872

BY

SELIM H. PEABODY, M.A.

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SOMETIMES a-dropping from the sky
I heard the sky-lark sing;
Sometimes all little birds that are,
How they seemed to fill the sea and air
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About Swallows.

BRANCH — *Vertebrata.* — Having a back bone.

CLASS — *Aves.* — Birds.

ORDER — *Insessores.* — Perchers.

TRIBE — *Fissirostres.* — Having bills deeply cleft.

FAMILY — *Hirundinidæ.* — Swallow-like.

HEN Summer comes the Swallows come. In far off southern lands they have escaped the cold of our dreary winter months, and have found, while wandering, an ever present spring time. Now, whole flocks are sweeping about us, darting through the air with a swift flight which almost eludes our sight. With most of the small birds, the Swallows migrate, going to

warm climates in the autumn, and returning to cooler countries in the spring. A few may creep into hollow trees, and pass the winter in a torpid condition, like frogs and bears. At one time it was supposed that they found winter quarters in the water, at the bottom of streams and ponds. People imagined this because they did not see the Swallows on their journey, like the pigeons and geese. But if we remember that their usual rate of flying is a mile in a minute, or more than twice the ordinary speed of railway trains, and that, in the day time, they are almost always on the wing, we see that these little creatures may pass in a few days even from the arctic regions to the torrid zone.

"Yet," says Wilson, "it is forced, when winter approaches, to descend to the bottom of rivers, lakes and mill-ponds, to bury itself in the mud, with eels and snapping-turtles, or to creep ingloriously into a cavern, or a rat-hole, or a hollow tree, there to doze with snakes, toads, and other reptiles, until the return of spring! The geese, the ducks, the cat-birds, and even

the wren, which creeps about our out-houses in summer like a mouse, are acknowledged to be migratory, and to pass to southern regions at the approach of winter; the Swallow alone, on whom Heaven has bestowed superior powers of wing, must sink in torpidity to the bottom of rivers, or doze all winter in the caverns of the earth!"

The habits of the Swallows are, perhaps, more easily observed and more generally known than those of almost any other birds. The air is, indeed, their home. They eat, drink, and even feed their young, while on the wing. The beak is very short, broad at the base, much flattened, and deeply cleft, forming a large scoop-like mouth, with which they gather up insects as they fly. They are fond of skimming along within a few inches of the smooth surface of water, sipping and flying. Their feet are short and weak, but their wings, when compared with the size and weight of their bodies, are remarkably large and strong. Their nests are usually made of mud, strengthened with twigs, hair,

and the like, and they are fond of building about dwellings and barns, probably for greater safety from birds of prey.

The Swallows all feed upon insects, and take their food in the air. At times they fly at a great height, so that they seem like tiny dots upon the sky; at other times they sweep over the ground, or near the water, chasing the gnats which come up in myriads from the surface.

The largest of this family is the Australian Needle-tailed Swallow, or Swift, *Acanthylis caudacuta*. It has the name Needle-tail on account of its curious tail-feathers. These are short and even, and have no web near the end, so that they form a row of short, sharp points.

Mr. Gould, in his "Birds of Australia," says: "So exclusively is this bird a tenant of the air, that I never, in any instance, saw it perch, and but rarely sufficiently near the earth to admit of a successful shot; it is only late in the evening, and during lowery weather, that such an object can be accomplished. With the exception of the crane, it is certainly the most lofty, as

well as the most vigorous flier of the Australian birds. I have frequently observed, in the middle of the hottest days, while lying prostrate on the ground, with my eyes directed upwards, the cloudless blue sky peopled at an immense height by hundreds of these birds, performing extensive curves, and sweeping flights, doubtless attracted thither by the insects that soar aloft during serene weather. Hence few birds are more difficult to obtain, particularly on the continent of Australia, where droughts are so prevalent; on the contrary, the flocks that visit the moister climate of Van Dieman's Land, where they must seek their food nearer the earth, are often greatly diminished by the gun.

"We may naturally conclude that both rocks and holes in the larger trees are selected for their nests, as well as for a resting-place during the night. Before retiring to roost, which it does immediately after the sun goes down, the Spine-tailed Swallows may be seen, singly or in pairs, sweeping up the gullies, or flying with immense rapidity just above the tops of the trees, their

never-tiring wings enabling them to perform their evolutions in the capture of insects, and of sustaining them in the air during the entire day without cessation."

The general color of this bird is olive brown, washed with a dark green tinge upon the back of the head, the wings, and the tail. Before the eyes there is a dark velvet patch, and most of the under part of the body is white. Its length, when its wings are closed, is twenty-eight inches, and twenty inches to the end of the tail.

The White-bellied, or Alpine Swift, *Cypselus melba*, is about eight inches long, and spreads its wings about eighteen inches, yet its weight is barely *one ounce*. Its general color is sooty black, its chin and throat being white. It builds its nest in crevices of high cliffs or buildings, and makes it of straw, hay, moss and other things, firmly cemented together with a kind of saliva. It lays four or five long, white eggs.

Another, the Common Swift, of England, *Cypselus apus*, is called, by the English boys, "Jacky Screamer." This bird usually makes

its home in holes in rocks, or in hollow trees, or in the thatched roofs of houses. "Formerly," says Wood, "when all the less pretending houses were covered with thatch, the Swifts had their nests in every roof, and the 'Jacky Screamers' used to hunt for flies in the streets, and boldly carry their prey to their young. The houses were so low that a man could touch the eaves by standing in a chair, and the habits of the birds were easily watched. Their nests were frequently robbed, but the birds seemed to care little for the bereavement, and quietly laid another couple of eggs. I seldom found more than three eggs in a nest."

The structure of its feet enables the Swift to scramble through the tunnel leading to its nest with great speed. It is most interesting to see it wheel about in the air, utter its sharp cry, answered by a little complacent chirrup from its mate within the nest, then dart into its hole as if shot from a bow, closing its wings as it enters the tunnel, and then scramble away with a quick and sure gait.

The Barn Swallow, of America, *Hirando horreorum*, is about seven inches long, the wings five inches; the tail is very much forked. Its color is steel-blue above, and reddish-brown beneath. It loves to build in barns, and the farmers often leave holes in the gables for its entrance. Its nest is made in the form of an inverted cone, with a slice cut off on the side by which it sticks to the rafters. At the top it has a kind of shelf, on which the bird sits occasionally. The shell is made of mud mixed with fine hay, as plasterers mix hair with mortar to make it less brittle; the mud is about an inch thick, placed in regular layers. The inside is filled with fine hay, well stuffed in, and covered with a handful of downy feathers. These birds are very social, and often twenty or thirty nests may be seen so close together that a finger could hardly be laid between them. The farmers have a superstition that ill luck will come to a person who kills one of them; and some think that a building which they take possession of will not be struck by lightning.

At all events, their sprightly warble makes even the rudest barn cheerful and homelike.

The American Chimney Swallow, *Acanthylis pelasgia*, is peculiar to this continent, and is quite different from its English name-sake, *Hirundo rustica*. These Swallows reach the Northern States about the middle of May or the first of June, and dwell wherever there are chimneys convenient for their purpose. Since they always choose a chimney for their home, some may ask what they did before white men built chimneys. In those sections of the country which are unsettled, they occupy tall, hollow trees, called Swallow-trees; but wherever there are settlements, the Swallows forsake the woods. They are more secure from birds of prey, they have better room for their sweeping flights, and they find a better surface, to which the material of their nests may adhere.

Their nests are made of very small twigs, fastened together with a strong adhesive glue, secreted by two glands on each side of the head, and mingled with the saliva. They are small

and shallow, and adhere by one side of the wall; they want the soft lining which is found within the nests of many other birds. The eggs are generally four, and two broods are often reared in a season. The noise which the old birds make in passing up and down the flues, has some resemblance to distant thunder, or in the silence of the night brings to persons with weak nerves suggestions of robbers. During heavy and long continued rains the glue sometimes fails to hold the nest, and, with its contents, it drops to the bottom of the chimney. If eggs, they are, of course, destroyed; the young birds, if there are any, often scramble up the sides of the flue, holding on by their toes, and are fed in this position for some time.

This Swallow is distinguished, when in the air, by its long wings, short body, the quick vibration of its wings, and its wide, unexpected, diving flight, shooting swiftly in various directions with no apparent motion of its wings, and uttering quickly its hurried *tsip*, *tsip*, *tsip*, *tsee*, *tsee*. It is very gay in damp weather, at the

approach of rain, and after a passing shower; it is out early in the morning and late at night. Early in September these birds assemble in convention, about some lofty tree or tall spire, wheeling about and chirping as busily — and as much to the purpose — as a party of politicians — perhaps nominating a mayor or governor — and then they take their flight for a warmer clime.

A very interesting member of this family is the Sand Martin, or Bank Swallow, *Cotile riparia.* In size, this bird is one of the smallest, being less than five inches long. Its color is soft brown, with black wing and tail feathers; the under surface is white. One would hardly expect to find the home of so graceful and delicate a bird in the ground, but with its sharp bill it manages to dig a burrow, where much larger four-footed creatures would fail. It makes its hole in any sandy soil, but most loves a light sandstone, because its work keeps best shape in that. The depth of the burrow varies from two to five feet, but the end is usually

beyond the reach of the arm. Generally it is quite straight; should a root or stone be in the way it winds about it, or, if the obstacle is too large, the bird leaves the hole and begins again. In all cases it slopes gently upward, so that any water which comes in may easily run out.

The bird sets at work in a very workmanlike way. It first taps several places with its beak, until it finds one which will suit. Then it turns on its legs as a pivot, working all round a centre, and chipping out a very regular circle, and so pushes on, clinging equally well to roof or sides, and going back and forth with the greatest ease. The nest at the end is globular, and lined with a few bits of soft substance—hay, moss or feathers. The eggs are very small and delicate. When new laid they are pink, but afterwards become white.

The voice of the Sand Martin is a weak twitter; when the birds are plenty their chirping may be heard at quite a distance. When it is angry or frightened it pours forth a harsh scream. It does not tolerate other birds in the

vicinity of its home, and a mob of Sand Martins will even drive away a hawk. They usually make their burrows in the bank of a stream or lake, where they may find a supply of food in the insects which swarm about the water, and their numbers often suggest the countless swarms about an immense bee-hive.

The Purple Martin, *Progne purpurea*, is found throughout America, from the Gulf of Mexico to Hudson's Bay. It loves to build about human habitations; even the Indians respect it, and contrive homes for it by hanging gourds about their wigwams. The more civilized farmer provides neat boxes which he fastens on the top of the house, or on tall poles. Sometimes the Martins presume in their familiarity and drive the pigeons out of their houses. But, wherever they find a home, they are very constant in their attachment, making but one nest, and returning to it year after year.

Where a pair of Martins have established themselves they will allow no other larger bird to dwell. A hawk, a crow, or a jay,

which presumes to intrude, is pounced upon without mercy, and so tormented that he is glad to escape. Even the eagle is no exception; and it is a curious fact that though the Martin will fly at the king-bird, it will join with the king-bird to chase away the eagle. Its flight is so rapid that it has nothing to fear from the talons of the larger bird, and so it attacks him in safety. The color of the bird is a rich, deep, very glossy purple, the wings and tail being black. It lays from four to six eggs, and brings out two broods in a year, the male and female each sitting on the eggs in turn.

A beautiful species, found in Australia, called the Fairy Martin, *Hirundo ariel*, is one of the most ingenious of the bird-builders. Its nest is shaped like an oil flask, and made of mud and clay, which the bird kneads thoroughly with its beak. Several birds build at one nest, one staying inside and shaping the mortar which the others bring to him. In pleasant days the birds work only in the morning and evening, because the mud dries before they can mould it prop-

erly, but in rainy weather they keep at work all day. The necks of these bottles are from seven to ten inches long, and the bulb or nest is from four to seven inches in diameter. The outside is rough, like the nests of the common Swallow, but the inside is beautifully smooth. Sometimes these mud-flasks are fastened to a house, in rows under the eaves; sometimes they are placed upon the steep face of a cliff, and then hundreds may be seen close together, without the slightest order, the necks sticking out in all directions. They are always near water, but not near the sea.

An American Swallow builds a nest quite like that of the Fairy Martin. This is called the Rufous, or Red-Necked Swallow, *Hirundo fulva;* it is sometimes called the Republican Swallow, because it gathers in large companies. The nests have a wider and shorter neck than those of the Fairy Martin. Towards night these birds gather in large flocks, calling to each other, so that at a distance their flight seems like a moving cloud. Suddenly this

cloud seems to gather, and then descend in a spiral, like a water-spout. When within a few feet of the bushes, they scatter in all directions, and settle upon the branches. When day dawns they rise again, after flying low over the water, and then move away after food in different directions. The hunters knock them down in great numbers with the short paddles used with their canoes.

The Palm Swift, *Tachornis phœnicobia*, of Jamaica, is marked even when flying by a broad white band across its black body. It builds in the hollow places about the leaves in the tops of the cocoa-nut palm, using a silky kind of cotton, which it felts together with a sort of slimy fluid. The nests are fastened upon the under surface of the palm-leaves, and are so hidden that they would not be easily seen, if the bird were not sometimes so liberal of its material as to betray itself. Several nests are found together. They are fastened to each other by the same substance, which glues them to the leaf, and are connected by a gallery

which runs along the side and opens into each nest.

Nearly all the swallows which we have described make their nests by glueing together mud or sticks, or some fibrous substance, by the saliva which is formed in the bird's mouth. Some Swallows build entirely of this substance, and the nests, when made, are gathered, cleansed, and sold to the Chinese, who esteem them a great dainty for the table. There are four species of these makers of edible birds-nests. The nests are irregular in shape, are attached to each other, and are so rudely made that one can scarcely determine where the eggs were to be laid. They are always placed upon the side of a perpendicular rock, and are gathered by men who are lowered by ropes from above. The nests which have been used by the birds to rear a brood of young bring but a low price, while those that are quite new and white are worth their weight in silver. The nests are gathered three times a year, and at each gathering care is taken to

destroy all the old and discolored nests, in order to force the birds to make new ones; this labor occupies them about two months. Europeans think the nests rather insipid food, and of no great value. The trade in them is very large, amounting to more than fifty thousand pounds a year, worth nearly a million of dollars.

Although we have described by no means all the varieties of this very interesting family, the most important of them have been mentioned. We are not attracted to them by their plumage, although when we examine that we find their colors exceedingly rich and lustrous. Their song has little variety or harmony. We do admire their graceful forms, and their swift and airy motions. We love these birds for their activity in their own way of doing good; for their regular and constant return to old homes and familiar haunts; and for the confiding trust with which they love to build and live about our dwellings.

THE BOB-O-LINK. *Dolichonyx Orizivorus.*

About Blackbirds.

VERTEBRATA. — AVES.

ORDER — *Insessores.* — Perchers.

TRIBE — *Conirostres.* — Having cone-shaped bills.

FAMILY — *Icteridæ.* — From Latin, *icterus.*

WIDE-AWAKE, noisy, impudent fellow is the Blackbird. He comes quite early in the Spring, and as you pass some spreading tree in the pasture, or skirt along the willow copse by the meadow, you see that he has brought with him his whole family, and all his acquaintances. The brush is black with them, and they all seem in earnest debate, rising, and perching, and chattering

incessantly; and then, all on a sudden, away flies the whole flock. You knew they were countless, but, as they fly, it seems as if the largest half of them had been in ambush, or had sprung out of the ground.

Like the "crane and the swallow," the Blackbirds "know the time of their coming." Before they leave the southern states they gather in numbers which are almost incredible. On one occasion, in the month of January, Wilson says he met in Virginia, on the Roanoke River, a prodigious army of these birds. They rose from the surrounding fields with a noise like thunder, and, descending on the length of road before him, covered it and the fences completely with black; when they again arose, and, after a few circles, descended on the skirts of the high-timbered woods, at that time destitute of leaves, they produced a very singular and striking effect; all the trees for a considerable distance, from the tops to the lowest branches, seemed as if hung in mourning; the notes and screaming of the birds meanwhile resem-

bling the distant sound of a great cataract, but in more musical cadence, swelling and dying away in the air, according to the fluctuation of the breeze.

This bird is known among us as the common Crow Blackbird, and is often called by naturalists the Purple Grakle, *Quiscalus versicolor.* At a distance his plumage appears jet black, but on a nearer view it is found to be a very dark purplish green, with glossy reflections of steel blue, dark velvet, and metallic copper. The male is about twelve inches long, and eighteen in expanse of wing. The female is somewhat smaller, but similar in color.

The Blackbird feeds either upon seeds or insects. In the Spring he frequents swamps and meadows, and follows the furrows of the plow, even scratching in the ground for grubs and other insects which would do the farmer much harm. But when the tiny green shoots of the corn peep through the soil, he knows very well that there are nice soft grains beneath, and so, after his own fashion, he takes his pay

for the grubs he has slain. When the corn is in the milk the Blackbirds descend again upon the fields like a blackening, sweeping tempest. They strip off the husk as dexterously as if by the hand of man, and having laid bare the corn, leave little but the cobs. For these reasons it is hardly strange that the farmers think the Blackbird a pest, and make him an outlaw, in peril from the pelting of every idle, roving boy.

Most small birds are afraid of the larger kinds, and if a hawk or eagle show himself, they either hide themselves or try to drive him away, relying upon force of numbers or swiftness of wing. The Blackbird, however, is a curious exception, for it actually builds its nest in company with the Osprey, or Fish-hawk. The nest of the Osprey is a large mass of sticks, grass, leaves and similar materials. The foundation is made of sticks as large as broom-handles, and two or three feet long; on these similar sticks are piled, until the heap is some four or five feet high. These are interwoven with corn-stalks, straw, sea-weed, or leaves, the whole

mass being enough to load a cart. The birds occupy the nest year after year, even until the tree decays and falls to the ground.

The Blackbirds build their nests in the spaces between the sticks which form the nest of the Osprey. There, like vassals round the castle of their chief, they live and rear their young. Wilson found no less than four such nests about the nest of one Osprey, and a fifth on the nearest branch of a neighboring tree. Of course all the Blackbirds can not build in Ospreys' nests. Most occupy tall trees, generally in companies of fifteen or twenty. The nests are made of mud, roots and grass, and are lined with fine dry grass and horse-hair; they are about four inches deep, and contain five or six dull green eggs, spotted with olive.

The Red-winged Blackbird, *Agelaius phœniceus*, is found throughout the United States; it passes the winter in the south, and returns north early in the spring. The Red-wings fly in flocks, which rival in numbers, and in rapid and erratic motion, those of the common Black-

bird; indeed, the two birds often migrate together. On the wing they enliven their way with mutual chatter, and as genial Spring comes with them, we are glad to see them, although we know they will pull up corn. Their music is a compound of liquid, jingling notes, mingled with the jarring sounds of filing saws and creaking sign-boards, the whole uttered in downright earnest, and forming a curious concert of harmony and discord.

"Assembled in their native marshes," says Nuttall, "the male, perched on the summit of some bush surrounded by water, in company with his mates, now sings out, at short intervals, his gutteral *kong-quer-ree*, sharply calls *t'tsheah*, or, when disturbed, plaintively utters *t'tshay;* to which his companions, not insensible to these odd attentions, now and then return a gratulatory cackle, or reiterated chirp, like that of the native meadow-lark. As a pleasant and novel, though not unusual accompaniment, perhaps the great bull-frog elevates his green head and brassy eyes from the stagnant pool, and

calls out in loud and echoing bellow, *'w'rroo*, *'warroo*, *'worrorroo*, *'boarroo*, which is again answered, or, as it were, merely varied, by the creaking or cackling noise of his feathered neighbors."

The Red-wing usually builds its nest in some swamp, or marsh, abounding with alders. In these, and sometimes in a detached bush, in a tussock of rank grass in the meadow, the nest is curiously wrought with the long dry leaves of meadow grasses, and the slender blades of the flags, carried round the stalks of the leaves for support, and carefully interwoven. The meshes of this basket are filled with rotten wood, roots of grass, peat, and mud, making, when dry, a substantial shell, which is lined with fine dry stalks and rushes. The eggs are five in number, pale blue, spotted near the large end with light purple and dark brown. The male bird is about nine inches long. His color is deep glossy black, with bright scarlet over the shoulders. Most of the plumage of the female is black, the feathers being edged

with reddish, or yellowish brown, so that she is curiously mottled. The young are marked like the female, and do not put on the entire gay livery of the male until several years old.

Because the Red-wing is so fond of corn he is considered an intolerable nuisance, and is killed by every possible means. But there is another side to this story. What can the multitudes of these birds eat, after the corn is too large to pull, and before the ears are grown? During all the spring and summer they feed on little else but insects, choosing especially those which devour the young leaves of growing crops. Whether a grub be buried in the earth, eating away the root of a plant, or concealed among the the thick foliage, which it destroys, or boring a passage in the trunk of a tree, the Red-wing finds it, and eats it, or takes it to his young. Wilson examined the crops of many of these birds, and calculated that, upon the average, each bird destroyed fifty grubs daily, and, probably, twice that number. The number of insects, then, which these birds will eat

in a single season, is beyond conception, and they ought to be cherished, rather than destroyed. In all the eastern states, grain, fruit, and, in fact, every kind of crop which farmers raise, suffer immense injury, and are often utterly ruined by insects, which the birds would take care of if the farmers were wise enough to let them.

The Cow Blackbird, or Cow Troopial, *Molothrus pecoris*, enters the northern states about the first of April; about the middle of July it disappears again and is not seen until September, when it re-appears for a short stay before it goes south. It feeds upon worms and grubs, following the plow with the Red-wings and Crow Blackbirds, and is often busy about cattle, picking up the insects which they happen to disturb.

Unlike most other birds, the Cow-bird never pairs, and makes no nest; it lays its eggs in the nests of other birds and leaves them to their fate. The strangest part of this is, that the poor bird upon whose charity the egg has

been thrust, takes charge of it, and brings up the young bird hatched from it in preference to her own.

The following anecdote, by Doctor Potter, shows that the Cow-bird creeps slyly into the nests of other birds, and that even the most peaceable will sometimes resent the injury:

"A blue-bird had built for three summers in the hollow of a mulberry tree near my dwelling. One day, when the nest was nearly done, a Cow-bird perched upon a stake fence near, her eyes apparently fixed upon the spot, while the builder was busy upon her nest. The moment she left it, the intruder dashed into it, and in five minutes returned and flew away to her mates with noisy delight, which she expressed by her actions and tones. The blue-bird soon returned and entered the nest, but at once fluttered back with much hesitation and perched upon the highest branch of the tree, uttering a rapidly repeated note of complaint and anger, which soon brought her mate. They entered the nest together, and returned a sec-

ond time, uttering a continual complaint for ten or fifteen minutes. The mate then dashed away as if in search of the offender, and fell upon a cat-bird, which he chastised severely, and then attacked an innocent sparrow that was chirping its ditty in a beech-tree. After all this, the Cow-bird was found to have laid another egg next day." The observation was not continued, for a snake found the nest and destroyed its contents.

The egg is usually laid in the nest of some smaller bird, as the red-eyed flycatcher, the blue-bird, the chipping sparrow, or the golden crowned thrush. The egg of the stranger is hatched first. The great size of the intruder soon stifles the rightful heirs, and the parent bird carries away its own dead young to make room for the foundling; they are not found under the nest where they would have dropped if the little Cow-bird had shouldered them out. As soon as he is fledged the graceless little fellow deserts his foster parents and skulks about the woods, till, after a time, he instinctively

joins those of the same feather, proving the adage.

This bird is about seven inches long. The head, neck and breast is light chocolate brown; the rest of the body black.

But the most lively and cheeryble member of this family is called the Rice Troopial, *Dolichonyx oryzivorus.* In the southern states he is called the Rice-bird; in the middle states, the Reed-bird, or Reed-bunting; but all through the north he is known as the Bob-o-link, or Bob-linkum. These birds begin their journey from the south in March, and go leisurely along, fast or slow, as they find supplies, until May, or early June, finds them just taking possession of the meadows from Massachusetts to the Mississippi, all through the northern states.

"June's bridesman, poet o' the year,
Gladness on wings, the Bob-o-link, is here;
Half-hid in tip-top apple-blooms he sings,
Or climbs aginst the breeze with quiverin' wings,
Or, givin' way to 't in a mock despair,
Runs down, a brook o' laughter, thro' the air."

"O rapture! sunshine winged and voiced,
Pipe blown through by the warm wild breath of the West,
Shepherding his soft droves of fleecy cloud,
Gladness of woods, skies, waters, all in one,
The Bob-o-link has come, and, like the soul
Of the sweet season vocal in a bird,
Gurgles in ecstasy we know not what
Save *June! Dear June! Now God be praised for June!*"

— LOWELL.

The male has put on his wedding suit, black, trimmed about the head, shoulders and back with white. He is in excellent spirits, and pours forth incessant strains of lively music from every bush and fence. As he flits from tree to tree, by short fluttering sweeps, hovering over the field, he utters a jingling medley of sounds, rapid, constant and confused, which seem hardly possible from the throat of a single bird. Almost every listener translates his song variously. All know his opening strain, *bob 'lee*, *bob 'link*, *bob 'linkee*, *bob 'link*, but every school-boy hears his own mischievous pranks described in the jargon that follows, and every blushing girl knows he is the "little

bird that tells." But summer rolls on, and Robert of Lincoln finds a family upon his hands. He becomes more sedate. The gay white slashing of his coat is exchanged for the brownish yellow livery of his mate, and instead of his joyous spring-time song, he can only whistle *bob 'lee,—bob 'lee*, which soon becomes only *'weet 'weet, b'leet, b'leet.* He is about six inches long.

Madam Bob-o-link hides her nest very carefully and successfully in the thick grass. A nest which is before the writer just fills a paper collar-box, four inches in diameter, and two inches deep. It is merely a mass of short stalks and leaves of dried grass, hollowed out at the top. The six tiny eggs in it are about three-fourths of an inch long, quite pointed at the smaller end, pearly-white, and spattered with brown spots, which are largest and thickest at the broad end of the egg.

Like the other birds of this family, the Bob-o-links feed mostly upon insects, but, at harvest, show a decided taste for grain and corn. About

the middle of August they begin to migrate southwards. They are found in large flocks along the reedy shores of the Delaware, fattening upon the fields of wild rice, and many of them are taken for the markets of Philadelphia and New York. As the season advances they go on, and passing through the rice swamps of the Carolinas, become the Butter-birds of the West Indies.

Who taught these birds of the air to take their annual journey? How do they know the time of their flight? Who shows them the route from their winter homes in the sunny south to their summer mansions in the meadows and forests of the north? Who taught them to build their nests? Who tuned their varied song? These questions rise concerning all our summer birds, and though we can not tell how they learn to trace their way from one old haunt to another, we know that the same Being who painted their beautiful plumage, and tuned their melodious song, gave them an instinctive knowledge which forces them to do that which

is fitting at the right time and in the right way. Having no choice, no will, no reason, they can not go wrong, but work out their results according to the plan which their Creator designed.

THE O'LINCON FAMILY.

A flock of merry singing-birds were sporting in the grove;
Some were warbling cheerily, and some were making love;
There were Bobolincon, Wadolincon, Winterseeble, Conqueedle,—
A livelier set were never led by tabor, pipe, or fiddle,
Crying, "Phew, shew, Wadolincon, see, see, Bobolincon,
Down among the tickletops, hiding in the buttercups!
I know the saucy chap, I see his shining cap
Bobbing in the clover there,—see, see, see!"

Up flies Bobolincon, perching on an apple tree,
Startled by his rival's song, quickened by his raillery.
Soon he spies the rogue afloat, curvetting in the air,
And merrily he turns about, and warns him to beware!
"'Tis you that would a-wooing go, down among the rushes O!
But wait a week, till flowers are cheery,—wait a week, and, ere you marry,

Be sure of a house wherein to tarry!
Wadolink, Whiskodink, Tom Denny, wait, wait, wait!"

Every one's a funny fellow; every one's a little mellow;
Follow, follow, follow, follow, o'er the hill, and in the hollow!
Merrily, merrily, there they hie; now they rise and now they fly;
They cross and turn, and in and out, and down in the middle, and wheel about,—
With a "Whew, shew, Wadolincon, listen to me, Bobolincon!
Happy's the wooing that's speedily doing, that's speedily doing,
That's merry and over with the bloom of the clover!
Bobolincon, Wadolincon, Winterseeble, follow, follow me."

Oh! what a happy life they lead, over the hill and in the mead!
How they sing, and how they play! See, they fly away, away!
Now they gambol over the clearing,—off again, and then appearing!
Poised aloft on quivering wing, now they soar, and now they sing:—
"We must all be merry and moving; we must all be happy and loving;
For when the midsummer has come, and the grain has ripened its ear,

The haymakers scatter our young, and we mourn for the rest of the year;
Then Bobolincon, Wadolincon, Winterseeble, haste, haste away!"

— *Atlantic Monthly.*

THE DOWNY WOODPECKER. *Picus pubescens.*

About Woodpeckers.

VERTEBRATA. — AVES.

ORDER — *Scansores.*— Climbers.

FAMILY — *Picidæ.* — From *picus*, a Woodpecker.

RAT-TAT-TAT. *Rat-tat-tat-tat.* Do you hear him? There he is, on the dead top of that old oak tree. Here he comes, with his curving sweep, and lights on the trunk of this rock-maple. Now he sees you, and puts the tree between you and him, for safety. If you go round to see him, he goes round too, just peeping about the side, to keep you in one eye, while with the other he peers into every

cranny in the bark, into every old knot-hole or decayed spot, for any worm or grub which may have hidden itself away. Back he goes, and is hammering away again at that old tree, scooping out a nest for himself and his family. A brisk, busy, wide-awake bird, this Woodpecker, and one that will amuse you if you watch him closely.

His feet are not like those of most birds. The toes point, two before and two behind, and so, like the two hooks which grasp the ends of a barrel and lift it in the air, these hooks hold to the bark of the tree and allow the bird to run up or down, or hold on and hammer away at his leisure. His tail is armed with stiff pointed feathers, and while he clings with his claws this tail serves as a brace, the stiff quills resting against the bark and holding him up. His beak is hard, and sharp pointed. His tongue is upon the end of a long bone which divides at the throat, passes on each side of the neck and then unites again and goes on over the back of the head and the forehead, almost to

the base of the beak. By this means he can thrust out his tongue an inch or two beyond his beak, and spear an insect on its barbed point, as a fisherman spears a fish. Such as are too small to be harpooned thus, are caught by a slimy saliva which moistens the tongue.

The Woodpecker does not build a nest; he burrows. With his ivory beak he bores a hole in the body of a tree, usually finding some spot where the wood is decayed, and then, when he has reached the heart of the tree, he continues the burrow downwards, enlarging it into a convenient pocket. Here the eggs are laid, on no other bed than the few chips which the bird has not taken the trouble to remove. Sometimes the nest is entered by the wren, who allows the Woodpeckers to go on until he thinks the hole large enough for his purpose, and then drives them out and takes possession. At other times the black snake glides up the trunk, enters the burrow of the bird, eats up the eggs or young, and makes itself at home.

"The eager school-boy," says Wilson,

"after risking his neck to reach the Woodpecker's hole, at the triumphant moment when he thinks the nestlings his own, and strips his arm, launching it into the cavity, and grasping what he conceives to be the callow young, starts with horror at the sight of a hideous snake, and almost drops from his giddy pinnacle, retreating down the tree with terror and precipitation. One adventure of this kind was attended with serious consequences, where both snake and boy fell to the ground, and a broken thigh cured the adventurer of his ambition for robbing Woodpecker's nests." The nest of the Woodpecker, unlike those of most other birds, is exceedingly filthy, the smell being almost beyond human endurance.

Some twenty-five species of Woodpeckers are found in America, and others are known in all quarters of the globe. Of the American varieties, one of the best known is the little Downy Woodpecker, *Picus pubescens.* This bird is about six inches long. His head is velvety

black on the crown, and scarlet on the back, with a white streak over the eye. The back is black, marked with a stripe of downy white feathers. The wings and tail are black, spotted with white. The female has no scarlet on the head.

Because this bird digs holes in the bark of fruit trees, people wrongly suppose that he injures the tree, and therefore kill him.

Wilson says: "In the fall he is particularly fond of boring the apple trees for insects, digging a circular hole through the bark just sufficient to admit his bill; after that a second, third, etc., in pretty regular circles round the body of the tree. These circles of holes are often not more than an inch apart, and sometimes so close together that I have covered eight or ten of them with a dollar. From near the surface of the ground to the first fork, and sometimes far beyond it, the whole bark of many apple trees is perforated in this manner, so as to appear as if made by successive discharges of buck-shot; and our little Wood-

pecker is chiefly guilty of this supposed mischief. I say supposed, for they are not only harmless, but really good for the health and fertility of the tree. In more than fifty orchards which I have myself examined, those trees which were marked by the Woodpecker were uniformly the most thriving and productive. Many were upwards of sixty years old, their trunks completely covered with holes, while the broad branches were loaded with fruit. Of decayed trees, more than three-fourths were not touched by the Woodpecker."

The largest American bird of this family, and the handsomest, is the Ivory-billed Woodpecker, *Campephilus principalis*. This bird is about twenty-two inches long. His general color is black, glossed with green. A white stripe runs down the sides of his neck and along his back, tipping the feathers of the wings. The back of his head is adorned with a beautiful scarlet crest. His beak is long, ivory white, and nearly an inch broad at the base.

When he has been at work upon a tree, he leaves a heap of bark and chips, by which he may be known as an active workman. Large strips of bark are torn off, and the wood is pecked with holes as if a steel tool had been used. Yet the bird only attacks the decayed wood, to reach the grubs and worms within, leaving the sound wood untouched.

Like the others of the family, this bird digs his nest in the substance of the tree. The opening is carefully placed under some branch, that the driving rain may not enter; the hole is bored inwards a few inches, and then turns downward, extending from ten inches to nearly three feet. The diameter of the nest is about seven inches, but the opening is only large enough to admit the bird.

His note, when caught or wounded, resembles the cry of a young child. Mr. Wilson caught one near Wilmington, and took it to town in the box of his carriage. The cries of the bird attracted much attention, and the landlord at the hotel looked rather surprised

when Mr. Wilson asked for care for himself and his baby. The bird was locked up in a room, and Mr. W. went to look after his horse. When he returned he found the Ivory-bill mounted on the side of the window; he had broken off the plaster from a space about fifteen inches square, had cut a hole through the lath, and was fast working his way into the outer boarding of the house. In an hour longer he would have escaped. A string was tied to his leg and he was fastened to the table. While his captor was gone to find him some food, he attacked the mahogany table, and completely ruined it. He would not take food, and in a few days died.

The Indians honor the bold and fiery disposition of this bird, and carry its head and beak as one of their charms or "medicines." It is never found in cultivated tracts, but dwells in the lonely forest, among the largest trees, in the dim recesses of the cypress swamps.

Another well known species is the Red-headed Woodpecker, *Melanerpes erythrocephalus.*

This is one of the commonest birds, bold and not afraid of the society of man. He is as active in boring for insects as any other, while it must be confessed that he does some mischief. Wherever a tree, whether of cherry, peach, or apple, bears particularly good fruit, he is at hand to taste the earliest and the ripest, and if caught in the act, he thrusts his bill into the best specimen at hand and flies away with it, uttering a loud exulting scream. He likes to find his way through the husks into the rich, milky ears of Indian corn. Towards autumn he comes about the farmhouses and barns, and one often hears his lively tattoo on the shingles.

On account of his pranks in the garden he is much disliked, and a bounty is sometimes offered for his head. But, like other birds which are in bad odor, it may be a grave question whether, after all, he does not do more good than harm — whether he takes more than toll for the fruit he has helped to save. He is a gay fellow, and his bright colors contrast finely

with the green foliage, as he sweeps from tree to tree.

The head and neck are scarlet, and the upper parts of the body black, with a steel-blue gloss; a broad band across the wings and the lower half of the back is white. As the bird flies he looks as if he wore a white gown, with a black mantle over his shoulders, and a scarlet hood. He is about nine inches long. His note is shrill, and not unlike the cry of a tree-frog.

The Golden-winged Woodpecker, or Yellow-hammer, *Colaptes auratus*. This bird comes on the first bright days of Spring. He is a brisk creature, skipping about the tree trunks with great activity, running up or down, or spirally, either at play or in search of food. He may be tamed, but must be kept in a strong wire cage, without any wood, or he will, like the Ivory-bill, make a speedy escape. Even then his incessant hammering, begun at early dawn, will make too much racket for ears which would enjoy ordinary quiet.

He is about twelve inches long. His general

color is olive brown, with bands of black, and a black crescent on the breast; the lower parts are yellowish white, with black spots; the under surface of the wings and tail gamboge yellow. He has a crescent of red on the back of the head.

The most common English Woodpecker is the Green Woodpecker, *Gecinus viridis.* The boys call him Rain-bird, Wood-spite, Hew-hole, and Wood-wall.

Another is known as the Great Spotted Woodpecker, *Picus major.* Their habits are too nearly like those already mentioned to require description.

THE CROWNED PIGEON. *Gaura Coronata.*

About Doves.

VERTEBRATA. — AVES.

ORDER — *Columbæ*. — Latin, *Columba*, a Dove.

NO bird is more generally beloved than the Dove. The domestic Doves which throng about our dwellings attract us by their graceful forms, their delicate plumage, and their soft, liquid notes. Their wild relatives are loved as well for all these qualities, and for their gentle and constant affection for each other. The youngest child stretches out his hand in delight for the cooing dove. The maiden loves to feel it nestle in her bosom, a willing pris-

oner — to smooth its snowy plumage, and allay its rising fear. The mother finds a type of her own maternal fondness in the care of the Dove for her young, and the sorrowing mourner hears her own woes re-echoed in the sad moan of the Turtle-dove, bewailing her murdered mate. All through the Winter, when other birds have flown to sunnier lands, the glancing wings and rushing sweep of the flying Doves enliven the chilly scene, while at all seasons their presence, coming and going, gentle, harmless, familiar, makes the day, and the home, more cheery and sunshiny.

With few exceptions their flight is swift, and they can continue it for a long distance. The family is found in nearly all parts of the world, but is most abundant in warm climates. The colors of those best known to us are soft and delicate, rather than deep or brilliant, though some parts, especially the feathers about the neck, glow with changeful beauty. In warmer lands their plumage is varied with the most beautiful colors, and elegant forms.

All the birds of this order have a double crop. In this receptacle the food is mingled with a milky juice, until the mass becomes soft and pulpy; a portion of this is raised into the beak and fed to the young.

The first species which we will mention is the Rock Dove, *Columba livia.* It has this name because it frequents rocks rather than trees; even the young which escape from the dove-cot, and from broods which for many generations have never known any thing but wooden houses, build in rocky caverns rather than in trees. The general color of the wild Rock Dove is some shade of gray; the neck and throat are varied with changing hues of green and purple; the wings are barred with black.

From the Rock Dove have sprung all the many varieties of domestic Doves. Indeed, these birds can hardly be called tame, or domesticated. For the rocky cave, to which the bird's nature directs him, man substitutes a wooden box, and the Dove takes possession

of it, very much as the martin occupies the box provided for him, and as the chimney swallow builds in a place constructed by man.

The management of the dove-cot has become quite an art, and may be made profitable from the great number of young pigeons which are continually produced. It is said that a dove-house is best in the form of a circular tower. The rows of boxes should be so arranged about the inside that the partitions in one row of boxes may stand over the openings of the range beneath. The tower should be so large that a person standing in the centre can conveniently reach the boxes. A horizontal shelf, covered upon the under side with sheet iron, should be placed below the boxes to prevent rats from climbing up for the eggs or young birds. The boxes should be high enough to allow the bird to stand when feeding its young, and each box should have a platform before it, and be closed in front, with a hole just large enough for the bird to enter. This will prevent other Doves from disturbing the rightful tenants

when sitting. When the young birds are of proper age, those which the keeper wishes to mate should be shut up together, and in a short time they become so attached that only death or removal will divorce them. The Dove hatches a pair of eggs every month. The eggs are laid in three days, and hatched in fifteen more; the female sits by night, and the male during the day. When the young Doves, called squabs, are hatched, they require warmth for about three days, and are fed after this for about ten days, although they are sometimes found in the nest until the next brood is hatched.

Several curious varieties have been reared by pigeon fanciers, some of which are so unlike, that one would hardly recognize them as kindred. The Broad-tailed, or Fan-tailed Shaker, has a large number of feathers in its tail, which it spreads like a turkey, and shakes like a peacock. This pigeon flies awkwardly, and is apt to be overset or carried away by the wind. The Jacobin Pigeon has a frill of raised feathers,

beginning at the back of the head and extending down the sides of the neck, which resembles the hood worn by monks. Its head, wings and tail are always white; the other parts are often reddish brown, or fawn-colored, and sometimes white. The birds which are all white are most prized. A very curious variety, called the Pouter, or Cropper, has a way of puffing out his crop with air, until it is larger than himself. When the crop is inflated the other Doves sometimes strike it with their bills, and pierce a hole through the thin wall, thus causing the poor bird's death. The habit is unnatural and is likely to cause disease, so that the variety is not much esteemed. There are many other kinds, as Nuns, Owls, Barbs, Turbits, Horsemen, etc.

The Carrier Pigeon is also considered a variety of the Common House Dove. All pigeons are very fond of home, and have a wonderful power of finding their way back to their mates, when they have been separated. The remarkable feats of the Carrier Pigeon

have been made famous in prose and verse. In the wars of the ancient Romans, and during the Crusades, these birds were used to carry news from the inhabitants of besieged cities. Sometimes they were caught by the hawks of the besieging army, and the message fell into hands different from those intended. In later times Pigeons carried news of markets, and such items as are now sent by telegraph. In Turkey sentinels were posted in wooden towers at regular distances of thirty or forty miles, and the Pigeons flew from tower to tower. They wore about their necks little boxes of very thin gold, in which the messages were carried. After steamships crossed the ocean, Pigeons took the news from Halifax to Boston; when vessels arrived off Sandy Hook they were announced in New York in the same way.

To train the birds for this service, they are first carried in a bag or basket about half a mile from home, and then let go. This is done several times, and then the distance is increased to two, four, ten or twenty miles, until they

will return from any place. The message is written upon the finest of thin paper, and fastened with a pin to a feather under the wing, or tied with a string to the leg. The birds fly about twenty-five miles an hour. In foggy weather they are often lost; and when the ground is covered with snow they do not find their way easily. When starting, they rise to a great height, hover for a while in an undecided manner, and then, as if they had found the way, dart off like an arrow.

The Turtle Dove has always been regarded as the emblem of tender affection, from its general behavior, and from its gentle soothing note. The sacred writers loved the bird as coming with the Spring: "For the time of the singing of birds is come, and the voice of the Turtle is heard in our land." The American Turtle, or Carolina Pigeon, *Columba Carolinensis*, is generally known throughout the United States. Its flight is quick and strong, and marked by a peculiar whistling of the wings, different from that of the wild pigeon.

This bird is a favorite with all who wander in the forest, and listen to its mournful music. It has four notes; the first is high and seems to prepare for those which follow, three long, deep moanings, which win the sympathy of every hearer. After a few minutes' pause, the same mournful strain is repeated. The song, after all, is not mournful, but is a call of love, similar to those which have made the whole family celebrated.

The nest is rudely constructed of a handful of twigs, covered with fibrous roots, and contains two white eggs. The bird is about twelve inches long; its colors, above, brownish drab; below, pale olive.

Audubon describes a beautiful Dove which lives upon the small islands called Keys, about the coast of Florida. Its cooing is so peculiar that any one asks "what bird is that?" A man, who had once been a pirate, said that the soft and melancholy cry of this Dove, heard about the wells which the pirate crew had dug in one of those Keys, awakened in his heart

feelings of penitent sorrow. So deeply was he moved by the notes of the bird, the only soothing sounds he had heard while in his wild career, that he determined to desert his ship and try to escape. He returned to the well, and listening to the cooings of the Zenaida Dove, he prayed for mercy, and became again an honest man.

This bird places her nest on the ground, sometimes very carelessly, and at other times closely covered with tufts of grass. When sitting, she seldom leaves her nest, unless some one tries to catch her; then she waits and watches until the hand is almost on her, and she is off in a twinkling. The Zenaida is about the size of the Turtle Dove; plumage above, light brown, tinged with gray; underneath, brownish red, also passing into gray.

The Passenger Pigeon, of America, *Ectopistes migratorius*, is the most remarkable member of this whole family, on account of the untold numbers of the flocks in which it moves from place to place. Both Audubon and Wilson

give accounts of them which are almost too wonderful to believe. Audubon left his home, in Kentucky, one morning, and as the Pigeons were flying very thickly, sat down to count the flocks as they passed. He put down a dot for each flock, and in twenty-one minutes had noted one hundred and sixty-three dots. He went on his way, and at night reached Louisville, fifty-five miles distant, but the Pigeons were yet flying, and so continued for three days! "A hawk chanced to press upon the rear of a flock. At once, like a torrent, and with a noise like thunder, they rushed into a compact mass, pressing upon each other toward the center. In these solid masses they darted forward in indulating and angular lines, descended and swept over the earth with inconceivable velocity, mounted perpendicularly so as to resemble a vast column, and when high were seen wheeling and twisting within their continued lines, which then resembled the coils of a gigantic serpent." If one wished to see the scene repeated, he had only

to wait until the next flock came up, when it would follow through the same movements.

"As soon as the Pigeons discover sufficient food to entice them to alight, they fly in circles, reviewing the country below. During the evolutions on such occasions the dense mass which they form exhibits a beautiful appearance as it changes direction, now displaying a glistening sheet of azure, when the backs of the birds come together into view, and anon, suddenly presenting a mass of deep, rich purple. They then pass lower, over the woods, and for a moment are lost among the foliage, but again emerge and are seen flying aloft. They now alight, but the next moment, as if suddenly alarmed, they take to wing, producing by the flapping of their wings a noise like the roar of distant thunder, and sweep through the forest to see if danger is near. Hunger, however, soon brings them to the ground. When alighted they are seen industriously throwing up the leaves in quest of fallen mast. The rear ranks are continually rising, passing over the main

body, and alighting in front, in such rapid succession that the whole flock seems still on the wing. The quantity of ground thus swept is astonishing, and so completely has it been cleared that the gleaner who might follow in the rear would find his labor completely lost. Whilst feeding, their avidity is so great at times that in attempting to swallow a large acorn or nut they are seen gasping a long while, as if in the agonies of suffocation."

The same author visited a nesting place of the Pigeons, on Green River, in Kentucky. It occupied a part of the dense forest, where the trees were large and the underbrush scanty, and extended over a space forty miles long and three miles wide. The birds had been there about two weeks, and a large number of people from all directions had encamped near the border. Some had come more than an hundred miles, and had driven their hogs to fatten upon the Pigeons. Towards night every body prepared to receive the flock with pots of burning sulphur, torches, poles, and guns.

"Suddenly there burst forth a general cry of 'Here they come.' The noise which they made, though yet distant, reminded me of a hard gale at sea, passing through the rigging of a close reefed vessel. As the birds passed over me I felt a current of air that surprised me. Thousands were soon knocked down by the pole-men; the birds continued to pour in, the fires were lighted, and a most magnificent as well as wonderful and terrifying sight presented itself. The Pigeons arriving by thousands alighted every where, one above another, until solid masses as large as hogsheads were formed on the branches all around. Here and there the perches gave way with a crash, and falling on the ground destroyed hundreds of the birds beneath, forcing down the dense groups with which every stick was loaded.

"It was a scene of uproar and confusion; no one dared venture within the line of devastation; the hogs had been penned up in due time, the picking up of the dead and wounded

being left for next morning's employment. The Pigeons were constantly coming, and it was past midnight before I perceived a decrease in the number of those that arrived. Towards the approach of day the noise in some measure subsided; long before objects were distinguishable the Pigeons began to move off in a direction quite different from that in which they had arrived the evening before, and at sunrise all that were able to fly had disappeared. The howlings of the wolves now reached our ears, and the foxes, lynxes, bears, raccoons and opossums were seen sneaking off, whilst eagles and hawks of different species, accompanied by a crowd of vultures, came to supplant them and enjoy their share of the spoil."

This Pigeon feeds on mast, which includes beechnuts, acorns, and chestnuts, and on all varieties of grain, seeds, and berries. The amount which such enormous flocks consume must be likewise enormous. Wilson describes a flock of Pigeons a mile wide and two hundred and forty miles long, and assuming that

there were three birds in every square yard, and that each bird eats half a pint of food a day, their daily rations would amount to seventeen million bushels. For this reason their range of feeding must be very great, or they would soon leave famine behind them. They can the more easily extend their flight by their large and strong wings, so that in a few hours they may have removed to a distant land. One was shot, in the State of New York, whose crop was full of rice, which he must have gathered in the rice swamps of Carolina, and which could not have been in his crop more than six hours without being changed more than it was. The distance must have been at least three hundred miles, so that his speed could not have been less than fifty miles an hour. When settlements have become numerous, and the Pigeons have been much hunted, the large flocks become scattered, and the birds are shy.

The length of the wild Pigeon is about sixteen inches, but the long pointed tail occupies quite a portion, and the actual size is rather

less than that of the common Dove. The plumage is bluish-gray above; the breast is reddish-brown; the neck is shot with gold, green, and purplish crimson; the wings and tail are edged with white. Two or three broods are hatched each season, each brood consisting of a male and female.

A beautiful bird is found in the Pelew Islands, called the Oceanic Fruit Pigeon, *Carpophaga oceanica.* It is a forest bird, and is very fond of the mace, or outer covering of the nutmeg. This food gives its flesh a very delicate aromatic flavor, which makes it in great demand. During the nutmeg season it becomes very fat, so that it even bursts open when brought down by the gun. Besides its value for food, it is very useful in planting the nutmeg tree. It swallows the nutmeg, with its covering, but only the mace digests, and the nut is not only uninjured as it passes through the bird's stomach, but it is with difficulty made to grow in any other way; when planted

by man it must pass through a peculiar preparation to make it come up.

This bird wears a singular knot at the base of the upper part of the beak, about the size and shape of a cherry. The plumage of the back is light green; the throat and breast are rusty gray, and the neck gray, shot with blue. The length is about fourteen inches.

The most conspicuous of the family is the Crowned Pigeon, *Gaura coronata.* It is a native of Java, and New Guinea. It is very large, and its crest gives it an appearance quite unlike the rest of the pigeons. It has a majestic gait, and a queer habit of lying in the sun with its wing stretched over itself, stiff, and spread like a tent. Its cry is loud, and sounding, like a mixture of trombone and drum, and when it utters its note it bows so low as to sweep the ground with its crest.

In the Mauritius, about two hundred and fifty years ago, the Dutch voyagers found a large bird which naturalists have classed with the Pigeons. This bird the old Dutchmen

called Dod-aers, meaning bird-that-wallows, and the word has been contracted to Dodo. The species has long since vanished, and now nothing is left to prove that it ever lived, except a few drawings, and the head and feet of a single specimen.

One voyager wrote of it: "It hath a great ill-favored head, covered with a kind of membrane resembling a hood; a bending, prominent, fat neck; an extraordinary long, strong, bluish-white bill. Its gape, huge, wide, as being naturally very voracious. Its body is fat and round, covered with soft, gray feathers, after the manner of an ostrich. It hath yellow legs, thick, but very short; four toes in each foot; solid, long, as it were scaly, armed with strong black claws. The flesh, especially the breast, is fat, esculent, and so copious that three or four Dodos will sometimes suffice to fill one hundred seamen's bellies."

They were so plentiful at one time, and so easily killed, that the sailors were in the habit of slaying them for the stones found in their

stomachs, which the men used to sharpen their clasp-knives.

In this instance an entire race of creatures has vanished from the earth, within the memory of man. The records of the rocks show that many other species, even entire orders of animals, have disappeared in like manner. So also other races have been created and placed in such circumstances as were adapted to their growth and preservation. Each species has had the form, the clothing, the habits which the Creator gave it at its beginning of life, and no instance has ever been found in which one tribe, or family, or species, has gradually changed and developed into another.

THE CARRION CROW. *Corvus corone.*

About Crows.

ORDER — *Insessores.* — Perchers.

TRIBE — *Conirostres.* — Having cone-shaped bills.

FAMILY — *Corvidæ.* — Latin, *Corvus*, a Crow.

COME we now to a family of birds which seldom find favor with man. In the first place they are black, and there has always been a certain foolish and groundless prejudice against any creature which wears that sombre color; — a black sheep is the derision of the flock; a black cat is the fit confidant of a witch; the prince of evil is painted black, though some have

thought him not so black as he is painted; a black man is hardly admitted to the rights of manhood; the only exceptions are dogs and horses; — and Crows are black. In the next place, in the great variety of things which furnish them a living, they persist in eating certain items which man claims as his, and denies their right to, particularly corn. Besides, some of them like meat which has been kept too long, that is, longer than man keeps that which he eats, and they eat it without cooking, or seasoning. Lastly, they are very cunning, and when man sets a price on their scalps, they contrive to keep their heads as much out of his reach as they can, even helping each other, while they jeer at him, and call after him, and ridicule him, with their hoarse crow laughter, for thinking he can catch them. So people give them bad names, deem them birds of foul omen, and will not recognize the good they do, in spite of all the ill usage they endure. For it is manifestly absurd that a bird should wear black, eat corn, like high-flavored flesh,

and avoid a gun, unless he has something sinister and wicked in his nature.

The first of these birds is the Raven, *Corvus corax.* He lives alone, in the wildest regions he can find, preferring a hilly country. He finds a home in all quarters of the globe, from Japan, through Europe, to America, and even in the coldest arctic winter, when wine freezes near the fire, he flies, croaking his hoarse cry, as carelessly as if the weather were that of returning spring. His food is mostly animal, and is not chosen with much care. In his long flight, if he pass a sheep or lamb which is sick, or has a broken leg, or lies floundering in the mire, he takes pity on it, and then picks its bones. Although very cunning, he may be brought within gun-shot, if one will lie on his back in an exposed place, — without moving, for, "though glad to find others carrion, or to make carrion of them, he takes good care that none shall make carrion of him. But if you lie on your back, he will come, you know not whence, and hovering round you on slow wing,

examine you on all points. If you do not stir he will drop down at a little distance and begin to hop in a zig-zag fashion, bringing his shoulders forward alternately. Sometimes he will utter his 'cruck-cruck,' and pause to see if that makes you stir, and if it does not, he moves on faster."

The Raven also eats all kinds of small game, and of birds; even the spines of the hedgehog will not protect from him. In the west he follows the hunter to feed on the offal of the game.

His craft is well illustrated by an anecdote related by Captain McClure, the arctic discoverer. Two Ravens were often seen about the ship, where she was frozen into her winter quarters. As the refuse of a meal was thrown out for the dog, the Ravens would put themselves in his way, as if inviting him to make his supper of them. The dog would run at them, and they would fly just out of his reach; then he would make another run, and so they tempted him on, until he was quite a distance

from the ship. Then they would fly back to the meat, and devour quite a portion before the dog could see the joke and rush back again.

The Raven is often captured while young, and tamed, but he makes a most troublesome pet. Unless placed where he can do no possible harm, he will get through more mischief in an hour than a squad of boys in a day, and he sets about his work as gravely, and labors as earnestly and persistently, as if he had a duty to do, which he was paid for and could not morally neglect. One used to watch a gardener while training some choice plant. The bird would sidle up to it, as if he did not see it, and with one wrench of his strong beak would lay it flat on the ground. The lady who owned the garden declared that the Raven was possessed by an evil spirit. He would follow behind her, and, as she turned, would still hop behind, so that she could never see him. His mischief could not be borne, and he was killed.

Another was an adept at fighting dogs. When the dog made a rush upon the bird, it would

step backward, and at the same time deliver a sharp blow with its pointed beak upon the dog's nose. A second rush would be parried in the same style, and so on until the dog could endure no more, and gave up. Another Raven was equally skillful in fighting cocks. When his enemy made the attack he would quickly step aside and avoid the blow, until at a convenient moment he would suddenly end the combat by biting off his antagonist's head.

The Raven was the first bird sent from the Ark, after the Deluge, which did not return; perhaps that was the same

> "Ghastly, grim and ancient Raven,
> Wandering from the nightly shore,"

which Poe saw in his delirious dream; which

> "Perched above a bust of Pallas,
> Just above my chamber door,
> Perched, and sat, and nothing more."

The ancient Romans connected many superstitions with the Raven. They watched his manner of flying, and from that pretended

to foretell if a journey would be safe or successful. They thought that a man who should eat the heart of a Raven would become a soothsayer.

How much pleasanter the remembrance that the Ravens fed Elijah in his hiding place beyond the Brook Cherith, bringing him "bread and flesh in the morning, and bread and flesh in the evening."

The Raven is about two feet long, and is really a handsome bird. His color is a uniform blue-black, with green reflections. His beak is high, round and knife-shaped, and surrounded at the base with bristles. Instances have been known where he has lived to the age of seventy or eighty years without showing any signs of old age.

Next of kin is the Carrion Crow, of Europe, *Corvus corone.* This is the bird the poets sing of, and is quite different from our American Crow. In habits he is much like the Raven. He got the prefix "carrion" because they said he would eat such food, and very

likely he would yet if he could find it, but, instead, he has usually to make his living upon reptiles, frogs, small birds, and whatever he can get. He often visits the sea-shore for the shell-fish which he can pick up, and if the shell is too hard, he takes it up with him, and drops it upon a rock to break it. He flies only with his mate, and builds his nest upon some tall tree, often near some dwelling. He is about eighteen inches long, and wears a black and very glossy coat, with reflections of purple above, and of green beneath.

The American Crow, *C. Americanus*, is smaller than his English namesake, and is not, like him, solitary, but gathers in flocks. He is about seventeen inches long; his color is glossy blue-black. About the middle of March the Crows begin to build their nests, usually in some high tree. They are made of sticks, bark, and moss, compacted with mossy earth, and are lined with quite a quantity of horse-hair, cow-hair and wool. On this soft and elastic bed are laid four pale-green eggs,

spotted with olive. When the female is sitting the male watches about her and brings her food, while both restrain their noisy chatter.

In May and June the Crow does most mischief, pulling up the corn as it comes up in the fields, so that the farmer has often to plant his ground a second or even a third time. For this he gets no mercy. The myriads of mice, beetles, caterpillars and grubs which he has destroyed are forgotten. He is an outlaw and must be executed. But first to catch him. In vain the gunner ranges for him, steals along the hedges, or hides in ambush. Some sentinel Crow, perched on a high tree, gives the alarm, and, far and near, the Crows answer and fly. When the man is gone, and the coast is clear, they return and finish their meal.

The persecution of the Crow makes him very crafty. The farmer often posts in the middle of his field an effigy of a man, made of a ragged suit, stuffed with straw, but the Crow understands that well enough. He does

not fear a live man unless he carries a gun, and as for a straw man, — he will stand on his shoulder and pick the oats out of his ear. Sometimes a wind-mill is contrived to make a constant clatter upon a tin pan, but the Crow soon gets used to that, — he can make more noise himself. But when the farmer stretches strings hither and thither across his fields the Crow is in doubt. There is some mystery about those lines which he can not fathom, and his caution keeps him out of the way.

In some states rewards have been offered for killing Crows, as for destroying panthers, wolves and foxes. They have been caught with clap-nets, and poisoned with drugged corn. Some have been taken with pieces of paper rolled up into cones, and smeared inside with bird-lime. A kernel of corn is put in the bottom of the cone, and when the Crow puts his head in, to take the corn, the lime glues the paper to his face, and shuts his eyes. One farmer exposed a dead horse near his barn.

As the crows gathered he shot them from a hiding place within, and so killed more than six hundred during the winter. The bounties on Crows and the price of the quills nearly paid for the horse, and the feathers filled a feather bed!

Yet, says Audubon, "The Crow devours myriads of grubs, every day in the year, that might lay waste the farmer's fields. It destroys quadrupeds innumerable, every one of which is an enemy to his poultry, and to his flocks. I can but wish men would reflect a little, and become more indulgent toward our poor, humble, harmless, and even most serviceable bird, the Crow."

In particular, the Crow is very fond of the "cut-worm" which does so much mischief by eating off corn, and other vegetables, just at the surface of the ground. There are hardly any of our insect-eating birds, which, at times, do not find it necessary to eke out their living with grain, chiefly corn. For this offence, eastern farmers have waged war upon

birds of all kinds to such an extent that their numbers have been much diminished, and, as a result, the number of harmful insects is very much increased. A quantity of English Sparrows was lately imported into New York to destroy the insects, but if our native birds could live unmolested, they would do all that is needed, and if they can not live, the sparrows will be likely to suffer the same fate.

The Crow is easily tamed, and then his true genius begins to be known. He soon learns all the members of the family, and screams at a stranger; can open a door by alighting on the latch; is very regular at breakfast and dinner, recollecting punctually the hour; is very noisy and talkative; can speak words quite distinctly; is a great thief, and hider of curiosities, secreting in holes and odd corners every article he can carry away, particularly small pieces of metal, corn, bread, and other kinds of food. A story is told of one which lived for some time in a family, and at length disappeared. It was supposed that he had

been shot. About eleven months after, while his master was standing by the river, one of a flock of Crows, which passed by, alighted on his shoulder and began to gabble away with great earnestness, as if he had found an old friend. The gentleman recognized the bird, and made several attemps, in a quiet way, to lay hold of him; but the Crow was too wary to be caught, and flew away after his companions.

A somewhat noted bird of this family is the Rook, *C. frugilegus.* This bird seems to be hated by English farmers quite as the Crow is hated by Americans, and the warfare between them is conducted in very much the same way. The farmer puts up scarecrows and racket-mills, and shoots the Rook when he can, while the Rook picks up the farmer's corn, bores holes in his turnips, eats his chickens, and keeps shy of his gun. The naturalists admit that the bird does some mischief, but contend that he does a great deal more good. They insist that he cares more for the wire-worm at

the root of the corn, than for the kernel, and that the worm would kill that shoot and many more. They prove that he consumes many beetles, both in their perfect state, and while they are grubs, and that both beetles and grubs are very destructive. So the Rooks seem to have the best of it, after all.

They live in colonies, many thousands sometimes finding a home on the trees of a single park. They pile sticks together into large and rather clumsy nests, and gather some softer material on which to lay their eggs. In these bird-towns there seems to be certain unwritten laws which the birds understand and obey. One law forbids any Rooks from dwelling in the limits of the town, except those born there; another forbids young Rooks from locating at a distance. Either crime provokes a conflict which ends in the destruction of the nest of the guilty parties. The old birds continue to use their nests year after year, cleaning them a little each Spring. The young ones, just beginning to keep house, have to

build for themselves. If the young birds build too near the old ones, it creates trouble, and the intruders have to move.

The Rooks are also said to hold courts for the trial of offenders. Some morning a great noise is heard in the rookery. The birds gather upon a few trees, and one, who sits by himself, with drooping head, seems to be the center of the disturbance. After much croaking, and flying hither and thither, in which may easily be imagined the examination of witnesses, the pleas of advocates, the charge of a judge, and the verdict of a jury, the birds fall upon the culprit and execute sentence of death. They particularly punish such lazy and dishonest Rooks as will not go away and bring sticks for their own nests, but stay at home and rob the nests of others. They are so intelligent as to observe the marks made on the trees which are to be cut for timber, and will not build, or allow the young birds to build on them.

They entice the young birds from the nest

as soon as they can flutter to another tree. For a little time they return to the nests to roost, but soon leave, and are gone during the Summer. In Autumn they return again, and sometimes make a few repairs upon their nests, but their voices have acquired a softened tone, and their meeting seems rather a mournful procession revisiting old scenes, than the noisy and busy throng of Spring. In a few days they are gone again for the Winter.

The Rook is about nineteen inches long; color, blue-black, glossed with purple. He may be distinguished from the Crow by a bald place on his forehead, and also at the base of the neck, where the feathers do not grow again after the first moulting.

The Jackdaw, *C. monedula*, is another English bird of this family, of infinite wit and humor. When wild he has many of the habits of the Rook. The greetings which Mudie describes between a flock of Rooks and one of Jackdaws, would make it appear that they understand each other. "When the

cawing of the Rooks on their morning flight was heard, the Jackdaws, which had previously been still and quiet, instantly raised their shriller notes, and flew to join the Rooks, both parties clamoring loudly, as if welcoming each other; and on the return the Daws accompanied the Rooks a little past their home; then both cawed their farewell and departed. What is more singular, I have seen, too frequently for its being merely accidental, a Daw return for a short time to the Rooks, a Rook to the Daws, or one from each race meet between, and be noisy for a space after the bands had separated. With the reason I do not interfere, not being in the secrets of either party; but the fact is as certain as it is curious."

In captivity the Jackdaw is a very amusing bird, and learns some very curious tricks. Wood says of one: "He was imitative in the extreme, and more than once had put the house in danger by his passion for lighting friction matches, of which amusement he was

as fond as any child. On one occasion he lighted the kitchen fire in the course of the night. The cook had laid the fire over night, intending to apply the match early in the morning. The Jackdaw contrived to get hold of the match-box, and had evidently rubbed the match upon the bars, and so set fire to the combustibles, as the cook found the fire nearly out, the Jackdaw in the kitchen, and some eighteen or nineteen exploded matches lying in the fender.

"The first time that this Jackdaw lighted a match he was so frightened at the sharp crackling report that he ran away as fast as he could go, coughing and sneezing after his fashion from the fumes of the sulphur, he having held the match close to the phosphoric end. He never seemed to distinguish the ignitible end of the match, and would rub away with great perseverance on the blank end, without discovering the cause of his failure. By degrees he contrived to singe all the feathers from his

forehead and nostrils, and once burned his foot rather severely.

"He was greatly afraid of thunder, and had a singular power of predicting a coming storm. In such a case, he would retire to some favorite hiding place, generally a dark hole in the wall, or a cavity in an old yew which exactly contained him, and would there tuck himself into a very compact form so as to suit the dimensions of his hiding place, his body being tightly squeezed into the cavity, and his tail projecting along the side. In this odd position he would remain until the storm had passed over, but if he were called by any one whom he knew, his confidence would return, and he would come out of his hole very joyously in spite of the thunder, crying out, 'Jack's a brave bird!' as if he entirely understood the meaning of the sentence. He may possibly have had some idea of the words, for he hated being called a coward, and would resent the term with all the indignation at his command."

The nest of the Jackdaw is rudely made in a hole of some decayed tree or old building. His general color is black, marked on the back of the head and nape of the neck with gray. He is fourteen inches long.

There are many more birds belonging to this large and interesting family, which are worthy of notice, but we shall only speak of one, the Magpie, *Pica caudata.* This bird is common in Europe, and in the south-western parts of the United States. His food is as various as that of the Crow. He is a constant robber of birds'-nests, eating the young, or stealing the eggs by driving his bill through them and flying away. He robs hens' nests in this fashion, and gets caught by it. The farmer takes away all the eggs but one, and that he empties and fills with bird-lime. Mag spears it, and flies away with his prize; he soon finds that it will not slip off his beak as he would like, and he batters it against a tree with a smart blow which scatters the adhesive

bird-lime over his head and wings, and makes him an easy prey.

The nest of the Magpie is built high in the tree. It is roofed over with thorns, leaving a hole just large enough to admit the owner. The building of nests is the subject of a curious fable.

"The birds, not knowing how to build nests, went in a body to ask the Magpie to teach them, which he was willing to do.

"'First,' he said, 'you must look out for a good strong, forked branch and begin by laying two sticks crosswise.'

"'That's just what I did,' said the Rook.

"'Next, you must raise the sides a little, and then put in some hay, which you must work well into the sticks.'

"'The very thing I have been doing,' said the Crow.

"'Now, for fear the eggs should be thrown out, you must raise the sides about as high as your head when you sit in the bottom of the nest, and put in some soft wool.'

"'Why,' said the Thrush, 'I did as far as that before I came here.'

"'Oh! then,' replied the Magpie, 'as I see that you all know how to make nests, there is no occasion for me to teach you.'

"And that is the reason why the other birds are only able to build half nests."

It is said that a Magpie can count three, but not four. One had his nest near a hut, in which a man hid in order to shoot the bird. He saw the man go in with a gun, and flew away. When the man left the bird came back. Then two went into the hut, and one came out, but Mag would not come back. Next three went in, and two came out, with no better luck. Then four went in, and three came out; the bird could not count four, and so went back and was shot.

A tame Magpie is very amusing, for its various odd tricks and its ability to talk, which it can do nearly as well as a parrot. It is also very mischievous, stealing every light thing it can carry away and hiding it in some out

of the way hole or corner. Servants have often been accused of stealing jewels or spoons, which the Magpie had secreted in his treasury. An old gentleman, when reading, used to lay aside his spectacles, take snuff, think on what he had read, and then, resuming his spectacles, go on again. One day the Magpie stole first the red-leather spectacle-case. Then he watched, and when the old man laid down his spectacles, he carried those off in a twinkling. Presently they were missed, and for a time the gentleman could hardly believe that some one had not played a trick upon him. The spectacles and several other missing articles were found in a hollow where two roofs met, — Mag's hiding place. Another made friends with a sheep, and used to hide his plunder in the wool on the sheep's back.

The Magpie is about eighteen inches long. His head, neck and back are black; throat, gray; shoulders, white; wings, blue; tail, long and wedge-shaped.

In England there are many superstitions concerning this bird. To see one, or two, or three together, is a sign of something, good or bad, while the ways in which the birds fly are of much consequence. Even so lately as in 1860, a request was made officially to the authorities at Dresden, in Germany, for a supply of Magpies. They were to be perfect, even to claws and feathers, and must be shot between the 24th of December and the 18th of January; they were to be made into a powder supposed to be a valuable remedy for the disease called epilepsy.

The signs are relics of the ancient art of divination, by which the people of Pagan Rome were humbugged. As for the medicine, being only dried and pounded meat, it is probably as effective as many other innocent prescriptions now much in fashion, whose only influence is on the imagination of the patient. Doubtless many persons recover after taking the medicine, and sometimes in spite of it.

GROUP OF HUMMING BIRDS.

About Humming-Birds.

VERTEBRATA. — AVES.

ORDER — *Insessores.* — Perchers.

TRIBE — *Tenuirostres.* — Having thin bills.

FAMILY — *Trochilidæ.* — Greek, *Trochilus*, the name of a small bird.

HUMMING-BIRDS live in America, and are found in some variety from Canada to Patagonia, though known in no other land in the world. Some of them wander over large distances, migrating like the larger birds; others are restricted to very narrow limits, only a few hundred yards wide, and on the slopes of a single mountain. They are most numerous in

Mexico and about the Equator. They are very small, always on the wing, swift as light, of very varied and curious forms, and splendid with gorgeous colors, which flash in the sunlight like the most brilliant and precious gems. When flying they move too swiftly for the eye to follow, and we see them suddenly appear, hover for an instant, and then as swiftly vanish. This rapid motion of their wings causes a low hum, like that made by some insects, and hence we call them Humming-Birds; in other languages their names have the same meaning. The hum differs in tone with the different species, so that a practiced ear can tell which kind is near, even before it is seen. The Black Cap, for instance, gives a tone like that of a wheel driven by machinery, while another gives the droning hum of a very large bee.

The wings of the Humming-Birds are long and slender, like those of the swallows, and when folded, they usually extend beyond the tail. When hovering over a flower, the wings

move so rapidly as to seem only like two filmy fans fastened to the bird. The legs are weak. The tails are strong, like the wings, and have every variety of form. Some are pointed, others round or square, others are forked; some are very long; others have but six feathers; but in all cases the tail has considerable motion, and, like a rudder, turns the course of the bird to the right or left, up or down.

There has been much dispute about the food of these birds, some claiming that they lived upon insects, others that they sucked the honey of flowers, like the honey-bees. It is now understood that their food consists of both honey and insects. The naturalist, Webber, tamed several of these little birds. At first they were very fond of the syrup which he furnished them, but after a while they began to droop, and he let them fly. They soon returned, as fresh as ever, for the supply of sweet food which they knew they should find. This occurred again, and when

they were next set free, Mr. Webber and his sister watched them very carefully.

He says: "We were sadly puzzled to think what it was they were dipping at so eagerly in the shrubbery, to the utter neglect of the many flowers. We moved closer to watch them to better advantage, and in so doing changed our relative position to the sun. At once the thing was revealed to me. I caught Ruby in the very act of taking a small spider, with the point of his long beak, from the center of one of those circular webs of the garden spider, that so abound in the South. The thing was done so daintily that he did not stir the dewdrops, which, now glittering in the golden sun, crowded the gossamer tracery, all diamond strung.

"Our presence did not disturb them in the least, and we watched them catching spiders for half an hour. They frequently came within ten feet of our faces, and we could distinctly see them take the little spider from the center of the wheel where it lies, and swallow it

entire. After this, we let them out daily, and although we watched them closely, and with the most patient care, we could never see them touch the spiders again until the usual interval of about a fortnight had passed, when they attacked them as vigorously as ever; but the foray of one morning seemed to suffice. If we shut them up past the time, until they began to look drooping, and then brought one of those little spiders with other insects, they would snap up the spider soon enough, but paid no attention to the others."

The bills of the Humming-Birds are all thin and sharp, but vary considerably in curvature, and in some other respects. Each species has the form, straight or curved, turned up or down, which is best fitted to reach its food in the deep cups of the flowers which it visits. The tongue is long, thread-like, and double nearly to the root. At the throat it joins a curiously forked bone which passes on either side of the neck, and round the back of the head, ending in the forehead. This is so

arranged that the bird can thrust its tongue out a long distance, and pick up an insect or gather a drop of honey at the bottom of the long tube of a flower. The common woodpecker has such a tongue, and can use it in the same way.

More than three hundred species of these little birds are known, and others are continually being discovered.

The Humming-Bird most common at the North is the Ruby-throated, *Trochilus colubris.* Its plumage is golden-green above, golden-red about the throat, fine purple-brown on the wings and tail, and white beneath. The general tint of the throat is ruby, but it varies, as the light is reflected from it, from deep black, through every shade of red and green, to a glow of light, like the blaze of a furnace at white heat; and all these hues have the same radiant, metallic lustre.

The Ruby-throat is a bold little fellow. He is so swift of wing that he cares not for hawk or owl, and will even drive away the eagle

himself, when the royal bird ventures too near his home. He has been seen to perch upon the head of the bald eagle, and peck away with right good will, tearing out the white feathers, while the great bird dashed screaming through the air, unable to get rid of its tiny torment.

As the bird is only three and a half inches long, his nest is very small. It is round, neatly made, with thick walls and a small hollow. The bird usually fixes it upon the top of a bough, but sometimes fastens it to the side of the trunk; in either case it is made so much like a knob of the tree, that only a practiced nest-hunter would perceive it. The female is very cautious when going to the nest. When she is near it she rises high in the air, out of sight, and then drops quickly down in the place, before one who is watching would be done looking where she vanished. The nest is woven of the cotton-like wings of certain seeds, like the downy thistle. These are wrought into a strong soft wall, and are covered with tne mosses which grow near by

on the stems of the tree. In this tiny bed, lined with the wool from the mullen stalk, the bird lays two little pearly eggs.

We have already mentioned Mr. Webber's Ruby-throats, which he let loose occasionally to hunt for spiders. He caught them by tempting them into a room with vases of fresh flowers, and then closing the window after them. Several injured themselves by dashing against the window pane. Finally one was caught in the hand, and when he came to look at it, the little fellow pretended to be dead. It lay on the open palm for some minutes without any motion; then gently opened one of its bright eyes to see if the way was clear, and closed it again when it saw its captor watching it.

A mixture of two parts of loaf sugar, one of honey, and ten of water, was brought, and a drop was touched to the point of its bill. In an instant it came to life, and was on its feet, sipping the food from a spoon. When it had taken enough, it sat upon the finger, and

plumed its wings as if quite at home. By the next day it would come from any part of the room, alight on the edge of the china cup which held its food, and drink eagerly, thrusting in its bill to the very base. A family of these birds, which Mr. Webber had tamed, migrated at the usual season, but the next year returned again and flew at once to the well-known window. When the cup of nectar was prepared for them, they came and supped, and brought their mates with them, so that quite a company of the beauties feasted with him.

Wilson relates that one which he captured seemed to suffer from cold, and to be almost dead; he carried it into the sunshine, and it soon revived, flew to a twig for a moment, and then vanished in the sunshine. It is possible that this, like Webber's bird, was only "playing 'possum," and that others which have been said to die from fright, were not quite so far gone as they wished to seem.

The Long-tailed Humming-Bird, of Jamaica, *Trochilus polytmus*, is a species which does not

migrate. The upper parts of this bird are green, glossed with gold, the wings purple brown, the tail black, with a steel-blue reflection. The throat, breast and under parts are a glowing emerald green. The whole length of the male bird is about ten inches, of which the tail is three-fourths. The female wants the long tail feathers, and is only about four inches long.

It is easy to catch these birds with a gauze net, but they usually die soon after. A few which were taken from the nest were tamed. Like the Ruby-throat, they fed upon nectar, with a meal of insects by way of a change. Each bird in a room had its own place for resting after flight, or at night, and would not allow another to occupy it; even if their owner wished to make them change places, they were uneasy, and each tried to regain possession of his own.

The nest is made of fine moss, cotton fibre, and spider-web, and is covered with mosses; it is hung to a bough or twig, and in one case

was suspended over the sea-waves by the twigs of a wild vine.

Some of the Humming-Birds have a tuft of white downy feathers, like a powder puff, about each leg. These are called Puff-legs. The Copper-bellied Puff-leg, *Ereocnemis cupreiventris*, is found in Santa Fé de Bogóta. It dwells in a belt of land from six thousand to nine thousand feet above the level of the sea, probably because its food is found only in that locality. The general color of this bird is green, washed on the back with bronze, on the breast with gold, and underneath with copper, whence its name. The wings are brown and purple. The puffs are snowy white, like swan's down.

One family wears a gorget of bright feathers about the throat, which gives them the name Flame-bearers, *Selasphora*. The Little Flame-bearer, *S. scintilla*, lives in the crater of an old volcano in Veragua, nine thousand feet above the sea. It is only two and a half inches long, and its flame is so bright that, as Mr. Gould

remarks, it seems to have caught the last spark of the volcano before it went out.

Nuttall describes a Flame-bearer, *S. rufus*, which he found on the Columbia River, in Oregon. "We saw the males in numbers, darting, buzzing and squeaking in the usual manner of their tribe; but when engaged in collecting its accustomed sweets in all the energy of life, it seemed like a breathing gem, a magic carbuncle of glowing fire, stretching out its glorious ruff as if to emulate the sun itself in splendor. Towards the close of May the females were sitting, while the males were uncommonly quarrelsome and vigilant, darting out at once as I approached the tree, like angry coals of brilliant fire, passing within very little of my face, returning several times to the attack, sailing and darting with the utmost velocity, at the same time uttering a curious sharp bleat, somewhat similar to the quivering twang of a dead twig, yet also so much like the real bleat of a small quadruped, that for some time I searched the ground,

instead of the air, for the actor of the scene. The angry hissing or bleating note seems something like *wh'r'r'r'r'sh vee*, tremulously uttered, and accompanied by something like the whirr of the night-hawk."

A very beautiful variety is the Sappho Comet, or Bar-tailed Humming-Bird, *Cometes sparganurus*. It is a native of Bolivia, and quite familiar, hunting the gardens and orchards, for the flowers of the apple and other fruit trees; it visits the cactus flowers for an abundant supply of insect food. The nest is made of fibres and moss, and has a long tail or queue, but what for no one knows. It is lined with hair, and is hung against the side of a rock or wall, supported either by the wall, or by some twig or swinging root. The bird always selects some place which is sheltered by an overhanging ledge. The body of this bird is light green, bronzed on the side of the neck; the lower part of the back is crimson red. The tail is formed like the letter V, each branch consisting of four fiery red

feathers, of graded lengths, each feather being tipped with black. This bird is about eight inches long.

Far up upon the Andes, even near the line of perpetual snow, varieties of these little birds are found. The Chimborazian Hill-Star, *Oreotrochilus Chimborazo*, is never seen lower than twelve thousand feet above the sea, and specimens have been taken at the height of sixteen thousand feet, or about four miles. It is usually found near an alpine plant, which grows at that height, and bears large yellow flowers. Its coloring is less bright than some of the family, except the head and throat, and these are of the most brilliant hues, the head blue, and throat emerald green. Another Hill-Star, which dwells on Mount Pichinca, is like the last, except the green spot on the throat. Although these volcanoes are only thirty miles apart, these birds, which live at about the same height on each, are never found to have passed from one to the other.

One of the minutest of this family, and of

all the feathered tribes, is the Vervain Humming-Bird, *Mellisuga minima.* It lives in Jamaica. Mr. Gosse says: "The West Indian Vervain is one of the most common weeds of neglected pastures, shooting everywhere, its slender columns set around with blue flowers to the height of a foot. Our little Humming-Bird visits these spikes in succession, flitting from one to another exactly in the same manner as the honey-bee, and with the same business-like application and industry.

"I have watched with much delight the evolutions of this little species at the moringa tree. When only one is present, he pursues the round of the blossoms soberly enough. But if two are at the tree, one will fly off and suspend himself in the air a few yards distant; the other presently starts off to him, and then, without touching each other, they mount upward with strong rushing wings, perhaps for five hundred feet. They then separate, and each starts diagonally towards the ground like

a ball from a rifle, and wheeling round comes up to the blossoms again, and sucks as if it had not moved away at all. Frequently one alone will mount in this manner, or dart on invisible wing diagonally upwards, looking exactly like a bumble-bee. Indeed, the figure of the smaller Humming-Birds on the wing, their rapidity, their wavering course, and their whole manner of flight, are entirely those of an insect, and any one who has watched the flight of a large beetle or bee will have a very good idea of these tropic gems painted against the sky."

The nest is small, at first, and rather shallow. When the young birds are hatched, the mother sets to work again and raises the sides of the nest to keep the chicks from falling out. When they are ready to fly the nest has been built into a deep round cup. All the Humming-Birds, with some other small species, make the rim of the nest curve inwards, so that, however hard the wind

may shake the bough, the eggs may not be thrown out.

In all this account of the Humming-Birds no mention has been made of their song. Except the single soft note of the Vervain Humming-Bird, and the complaining chirp of the Ruby-throat, they do not sing. Nature seems to have been sufficiently lavish in dressing them in so beautiful plumage. Usually the birds which are most beautiful are least valued for their song, while those which sing most sweetly wear the plainest garb. The thrushes, the lark, the mocking-bird, the nightingale, display only quiet, sober colors. The Humming-Birds are mute; the birds of paradise utter only hoarse croaks; the peacock is as notorious for his disagreeable scream as he is celebrated for his gorgeous train. Thus nature distributes her gifts. One has strength; another speed; another beauty; another melody; and all are given, not earned, or deserved. Then let not the swallow seek the strength of the eagle; or the eagle claim the

song of the nightingale; or the nightingale mourn for the golden glories of the Humming-Birds. So ought men, to whom good gifts have been in like manner variously distributed, to be content with that which they have severally received.

It has been suggested that all these are but the outward signs of love. "It may be, therefore, that on the one side the bird which has a good voice and plain dress, pours forth his love, and shows his sympathy, in gushing strains, which are addressed to the ear of his mate; again, the bright plumaged bird utters his voiceless song by the vivid hues that flash from his glittering attire, the eye being the only medium through which his partner, whose ears are not attuned to melody, could realize the fullness of his utterance. The one showers his musical tones like vocal rainbows, and the other scatters his rays of many-colored light in flashing hues or blending tints, and whether in sweet song or glittering vesture, the creature utters the love and sympathy of its nature."

THE SNOWY OWL, WITH OWLETS. *Nyctea Nivea.*

About Owls.

VERTEBRATA — AVES.

ORDER — *Accipitres*. — Hawks.

FAMILY — *Strigidæ*. — Latin, *Striæ*, a Screech Owl.

PERHAPS no family of birds have been misrepresented more commonly, or more unreasonably, than the Owls. In all countries, and in every language, the very name is a word of ridicule or of reproach, while the cry is supposed to foretell some fearful event. Goldsmith accuses him of treachery because he seeks his food by night — the bird is so made that he can not see by day — and because he steals upon

his prey, very much like the lion, who is called a noble animal, and the king of beasts.

The naturalists have given these birds names which suggest something noisy or disagreeable. The unlearned say of a stupid fellow, "he looks as wise as an owl!" But the Owl is not as fierce as the eagle, as cruel or unclean as the vulture, as noisy as the peacock, or as stupid as the ostrich; in fact he has just about as much cunning and prudence as the other birds of prey. He does the work that he was fitted to do. He flies by night, because he was made to feed on prey that is active at night. He sings just as sweetly as nature intended he should sing, and if he makes his nest in ruinous towers, it is because they afford him and his young a secure and quiet home.

The Owl has, usually, a large head, with a strong hooked beak; great, staring eyes, which look straight forward; a circle of feathers which surround each eye and partially cover the beak and the ear, and which make the large eye seem still larger; strong curved

claws, and soft, downy plumage, generally spotted with various shades of brown or yellow. His legs and feet are often feathered to the toes, and his claws admit of much motion, so that he can hold very small prey. His eyes are fitted for seeing in the dark, or at twilight. Some species see very well even in the day time, and others are quite dazzled by daylight. His flight is easy, buoyant, and noiseless, on account of the softness of his feathers. In a word, an Owl is very like a feathered cat, just as a cat is like a furred Owl. He feeds on birds, rats, mice, and small game of all kinds, swallowing his prey entire, and casting up the indigestible parts in small pellets. His nest is rudely constructed in the hollow of an old tree, in a fissure or cave in a rock, or among the crevices of some ruined wall. So on her

> "ivy-mantled tower
> The moping Owl does to the moon complain
> Of such as, wandering near her secret bower,
> Molest her ancient, solitary reign."

The Owl family may be divided into three branches. First, there are the Owls proper, having large external ears and the circles of feathers about the eyes entire, and which are nocturnal in their habits; next, the horned Owls, whose external ear is small, and which wear a tuft of feathers, like a horn, on each side of the head; and last, the hawk Owls, which have small eye-circles, and neither outer ear, nor feathery tufts.

The chief of the last family is the Great Snowy Owl, *Nyctea nivea*. This Owl, from its beauty, bravery, and endurance, has been called the King of the Owls. It dwells in the northern parts of both continents, where it finds its food and rears its young, among the wastes of rock and ice, in spite of the violence of arctic storms. In those regions where so much labor and life have been wasted in fruitless search for an impassable passage from European to Asiatic seas, this bird has been found at the most northern point, better

prepared by nature to endure the extreme cold, than men, with all the resources of art.

The whole plumage of this bird is pure white, without any marks whatever; the young birds, however, are marked with dark spots at the tip of each feather. The beak and claws are black. The eyes are bright as gold; by daylight they are very brilliant, and at night they glow like twin balls of fire. A story is told of a Snowy Owl, which alighted on the rigging of a ship to rest itself, after a long flight. A sailor who was sent aloft on some duty, speedily came down again, in a great fright, sure that he had seen "Davy Jones" sitting on the main yard, and glaring at him with his great eyes.

These eyes are fixed in the Owl's face so that he can not turn them, but his neck is so fitted that he can turn his head quite round without moving his body.

The food of this Owl varies with the season. In the short summer it takes many of the small birds. In autumn it flies low, and feeds upon

the grouse or ptarmigan, and when these are gone, it goes to the water and catches fish, waiting on the rock as patiently as a human angler. When the country is covered with snow, many of the smaller animals are driven upon the surface to seek the bark of bushes and trees, and on these the Owls manage to keep alive, until the melting snows disclose the bodies of creatures which perished under the sweeping storms of the preceding winter. Thus they live during all the year, and do not leave their snowy realms until driven to the last extremity.

In the great plains which border the Missouri and its branches, a small animal called the Prairie Dog is found in great numbers. These marmots — for such they are — something midway between a squirrel and a woodchuck — live in troops, and dig their burrows with considerable regularity, like towns, leaving streets between their burrows. The towns seem to be governed by some old fellow, whom the hunters call Big-Dog, who sits before the

entrance to his burrow, and issues his orders as mayor.

While no danger is feared, the towns-people are full of life, sitting on the mounds of earth which are left before each burrow, or running about to visit their neighbors. Suddenly a sharp yelp is given; at once quick barks reply on every side; the air is filled with a cloud of dust; nothing can be seen but a confused mass of whisking legs and tails, and the busy town is desolate. In a few moments a pair of eyes are peering out at one hole, a whisker peeps out at another, and presently all come forth again, as lively as before. But these animals are not suffered to occupy their towns in quiet. The vicious and the idle gather among them, and do them no small harm. Lizards creep into their houses; the deadly rattlesnake comes after their little ones, and a kind of burrowing Owl finds it more convenient to take possession of a marmot's burrow than to dig one for itself. This Owl, *Athene cunicularia*, has been accused of going after the young marmots, but

there is no evidence that it eats any thing but insects, and the "mice and such small deer" as come in its way. Its color is a rich brown upon the upper parts, spotted with grayish white, and whitish beneath. It is about eleven inches long. Its cry is much like the sharp, quick bark of the Prairie Dog.

The Great Horned or Eagle Owl, *Bubo maximus*, is the largest of the family, and seems to be nearly as large as the Golden Eagle. It is really much smaller, and owes its apparent size to its feathers, not to its body. Its weight is about one fourth that of the Eagle, but in power of muscle it is hardly inferior. It is found in Europe. Its place is occupied in America by the Virginian Eared Owl, *Bubo Virginianus*. This bird is a terrible destroyer of game, picking up grouse, partridges, hares, ducks, squirrels, and even attacking the wild turkey. The Owl tries to find a place where the turkey is asleep, and then swoops down upon its victim before it awakes. Sometimes the turkey is roused by the rush of wings, and

then it instinctively spreads its broad tail over its back and ducks its head. The Owl finds nothing but stiff, smooth feathers to grasp, its talons glide off from the protecting quills, and so the turkey escapes.

The color of this bird is reddish brown, marked with spots of black, brown, and gray, and covered with innumerable specks. Its large eyes are golden orange; beak and claws large and black; legs short and strong, and thickly clothed to the very claws with fine, downy plumage. The broad tufts, which resemble horns, are about three inches high, formed of twelve or fourteen black feathers edged with brownish yellow. Its flight is very powerful, easy, and graceful. Its voice is hollow; when heard by night it causes even a manly heart to quake.

"Along the mountainous shores of the Ohio, and amidst the deep forests of Indiana," says Wilson, "this ghostly watchman has frequently warned me of the approach of morning, and amused me with his singular exclamations,

sometimes sweeping down and around my fire, uttering a loud and sudden *Waugh O! Waugh O!* sufficient to have alarmed a whole garrison. He has other nocturnal sounds, not less melodious, one of which resembles the half suppressed screams of a person suffocating, or throttled, and can not fail of being very entertaining to a lonely, benighted traveler, in the midst of an Indian wilderness."

The Mottled Owl, *Scops asio*, a small and handsome species, sometimes called the Little Screech Owl, is common throughout the United States. It is oftenest seen in autumn and winter, when forced to approach barns or houses in search of mice. During the day it hides in hollow trees or thick evergreens, and it is subject to great derision and insult, even amounting to blows, if found by any of the smaller birds. It is about ten inches long, dark brown above, shaded with paler brown, and spotted with zigzag points of black and ash; the face is whitish, and the breast is marked with lines of black and brown on a whitish ground.

The Tawny Owl, *Surnium aluco*, is the one which, in England, makes night dismal with its loud lamenting cry. It is a sage looking bird, and among the rustics has a variety of names, screech-owl, madge-howlet, and Peter, being the most common. Its head and legs are very large, and it stands quite erect, so that it looks like a little fat old man, with plenty of wig, great round spectacles over a hooked nose, and an air as grave and reverend as a judge. Its soft feathers make it seem much larger than it really is, and as they are poorly fitted to keep out the wet, a rainy day reduces its size about one half. The rain, however, does not trouble it much, for, if it soon gets wet, it soon gets dry again.

A gentleman allowed a pair to build a nest in the attic of an unoccupied house. He says: "I should have been a little afraid of molesting them, so fierce did the old gentleman look when his wife and children were approached. One morning the cat was missing, and I found that some strange sounds had been heard the

evening before in the room where the Owls were. On going up that evening, I found poor puss quite dead, one of her eyes actually pecked out, and her antagonist, also dead, lying on the side of the nest. The mamma Owl was away, probably in search of food, but she may have been present and assisted at the death. I have seen a cat, at another time, cowed by an old Owl that came down the chimney into the dining room."

The length of this bird is about fifteen inches. Its beak is white; eyes blue; the circles round the eyes white, streaked with brown; plumage tawny brown, darkest on the head and back, lightest on the breast, and spotted or barred with light or dark brown. Its screeching and its hooting are alike dismal. It sharply cries *too-whit*, or utters an inward tremulous *too-whoo*, with a gloomy and subdued shivering, any thing but merry.

The Barn or White Owl, *Strix flammea*, is a delicately colored and soft plumed bird, always found near dwellings and farmyards, where it

loves to live, not for the sake of eating young chickens, but for the mice which make such havoc in the grain stacks and corn cribs. The number of mice which it destroys is almost incredible. Mr. Waterton estimates that when a pair of these Owls are rearing a brood, they bring to the nest four or five mice every hour. This gentleman established a colony of Barn Owls in the ivy which adorned the ancient gateway of his mansion. They multiplied rapidly, and repaid his protection by ridding the out-buildings of the great numbers of rats and mice with which they were infested. They were not sparing, it is true, of their music, which though rather discordant, was doubtless the best they could afford. Sixteen months after the apartment over the old gateway had been cleaned, more than a bushel of the pellets or castings of these Owls was gathered, each pellet containing the skeletons of four to seven mice. The amount of service done by a pair of Owls must therefore be greater than that of a large number of cats,

while their music could hardly be less agreeable.

The Owl has two ways of eating. If he has caught a mouse and is going to eat it, the mouse is first bitten smartly across the back so as to destroy all life, and when it hangs motionless from the bird's beak, it is tossed into the air very adroitly, so as to fall with its head downwards. The Owl then catches the head in his mouth, and holds it for a few seconds; then a sharp toss sends it down his throat, leaving the tail hanging out, usually at the left side of the bird's beak. The bird rolls this about for a bit, as a boy would a stick of candy, or a man a cigar, and then another jerk puts all out of sight. But when the Owl has to deal with a bird, like others of the hawk tribe, he strips off the feathers, and tears it to pieces.

This bird is easily tamed when young, and makes a very amusing pet. One each formed a friendship with a tame skylark, which he allowed to sit on his back, and to bury itself

in his soft plumage. This bird was an active enemy of bats, and killed small birds, as well as mice. It used to push its prey into a hole in the wall, made by the fall of a brick. In this odd larder was found a strange variety of game. Six or eight small birds would be counted early in the evening, and once as many as fourteen bats had been poked into the hole. Several times the bird had stowed away a moderate sized eel, which it had killed by a bite across the back.

Another tame Owl was approached by a dog, which came up to inspect the stranger. The Owl quietly rolled over on its back, and when the dog put his nose to the bird, it struck with its feet so sharply that it put out both the eyes of the poor dog, which had to be killed on account of the injury.

Many other species of Owls are named, but they agree in general appearance and habits with those we have described. They are all sober, sedate birds, hard-working and provident for their families, but solitary and seclu-

ded in their habits, minding their own business. But there is something in these very solitary habits, and something so discordant in their tones, when heard in the gloomy silence of night, that have impressed men with fear and dislike of the whole tribe. There is no good reason for this superstitious awe. There is nothing in the Owl supernatural or mysterious, or more than belongs to any bird of prey which hunts by night and rests by day. Its harsh voice, caused by its wide throat, serves, as was doubtless meant by its Creator, to alarm its prey, and make the frightened animals stir; thus the slight movement and consequent rustle shows the bird its game.

Although we must think that the reputation of the Owls is worse than their character, after all their character is none of the best. There is nothing pleasant in their appearance, nothing agreeable in their manners, nothing genial in their disposition or habits. They live only for themselves. Their good qualities are mostly negative, and the best we can say is, that they

might be worse. There are men and women of whom we have to say the same.

"In the hollow tree, in the old grey tower,
The spectral Owl doth dwell;
Dull, hated, despised, in the sunshine hour,
But at dusk he's abroad, and well!
Not a bird of the forest e'er mates with him,
All mock him outright by day;
But at night, when the woods grow still and dim,
The boldest will shrink away.
Oh! when the night falls, and roosts the fowl,
Then, then is the reign of the Horned Owl.

"And the Owl hath a bride who is fond and bold,
And loveth the wood's deep gloom;
And with eyes like the shine of the moon-stone cold,
She awaiteth her ghastly groom:
Not a feather she moves, not a carol she sings,
As she waits in her tree so still,
But when her heart heareth his flapping wings,
She hoots out her welcome shrill!
Oh! when the moon shines, and dogs do howl,
Then, then is the reign of the Horned Owl.

Mourn not for the Owl, nor his gloomy plight!
The Owl hath his share of good;
If a prisoner he be in the broad daylight,
He is lord in the dark greenwood!

Nor lonely the bird, nor his ghastly mate;
They are each unto each a pride;
Thrice fonder, perhaps, since a strange dark fate
Hath rent them from all beside!
So when the night falls, and dogs do howl,
Sing Ho! for the reign of the Horned Owl!
We know not alway
Who are kings of day,
But the king of the night is the bold brown Owl.

BARRY CORNWALL.

THE BELTED KINGFISHER. *Ceryle alcyon.*

About Kingfishers.

VERTEBRATA — AVES.

ORDER — *Insessores* — Perchers.

TRIBE — *Fissirostres* — Having bills which open wide.

FAMILY — *Alcedinidæ* — Latin, *Alcedo*, a kingfisher.

USUALLY there is, in midsummer, a time when nature seems asleep. The warm rays of sunshine do not crowd every leaf and twig with springing, budding life. The birds fly lazily through the still air, under a cloudless sky. The winds are whist. The waves of lake and ocean forget their tumult. Even the "multitudinous laughter" of the sea subsides into a placid smile,

and only the faintest splash is heard as the swells break idly on the beach.

The ancients called these Halcyon days, and we use the word as signifying days of peaceful rest, forgetting that Halcyon days means Kingfisher's days. The fable was that Alcyone, the Kingfisher, had some charm by which the winds and waves were stilled to rest, and kept at peace fourteen days, while the bird made its nest upon the water, and hatched its young. This charm was aided by the sweet song of the bird. The fact was, that those who invented this story, with all the fables that go with it, did not know where to look for the Kingfisher's nest, and as she lives about the water, they guessed that she, somehow, reared her young there. She does not make her nest on the water, or on land, or on a tree, but in a hole in the ground. The place chosen is at the foot of a bank, near the water, and is usually the burrow of some four-footed animal. The bird hollows out the inner end until large enough for her purpose, and takes

care to choose a burrow which slopes upward, so that the nest may be out of danger from water. The nest itself is made of fish bones, which the Kingfishers cast up from the fish eaten, just as the owls eject the indigestible parts of their food. The walls are about half an inch thick, and the shape is quite flat. The way in which the bones are arranged shows that the bird really forms them into a nest, and does not merely lay her eggs at random upon them. The partial decay of these bones is probably the reason why a Kingfisher's nest, and the bird itself, have such a vile and unendurable stench.

Mr. Gould thus describes his experience in procuring a nest:

"During one of my fishing excursions on the Thames, I saw a hole in a steep bank, which I felt assured was a nesting-place of the Kingfisher, and on passing a spare top of my fly-rod to the extremity of the hole, a distance of nearly three feet, I brought out some freshly-cast bones of fish, convincing me that I was

right in my surmise. I again visited the spot with a spade, and after removing nearly two feet square of turf, dug down to the nest without disturbing the entrance hole, or the passage which led to it. Here I found four eggs, placed on the usual layer of fish bones; all of these I removed with care, and then filled up the hole, beating the earth down as hard as the bank itself, and replacing the sod on top, in order that the barge-horses, passing to and fro, might not put a foot in the hole. A fortnight afterwards the bird was seen to leave the hole again, and my suspicion was awakened that she had taken to her old breeding quarters a second time.

"Twenty-one days after, I again passed the top of my fly-rod up the hole, and found not only that the hole was of the former length, but that the female was within. I then stuffed a large mass of cotton to the extremity of the hole, in order to preserve the eggs and nest from damage during my again laying it open from above. On removing the sod and dig-

ging down as before, I came upon the cotton wool, and beneath it a well-formed nest of fish bones, the size of a small saucer, the walls of which were fully half an inch thick, together with eight beautiful eggs, and the old female herself. The mass of bones, weighing 700 grains — about an ounce and a half — had been cast up and deposited by the bird, or the bird and its mate, besides the unusual number of eight eggs, in the short space of twenty-one days."

The Common or Belted Kingfisher, *Ceryle alcyone*, is familiar all over North America. He is about thirteen inches long. His back, and a belt across his breast, are blue; the under parts, and a spot before each eye, white; the tail black, barred with white. The head wears a long crest. His sudden scream is shrill and harsh, quite like the sound of a watchman's rattle; one would think not well adapted to lull waves, or any thing else, to rest. The Kingfisher sits quietly for hours on the branch of some tree which overhangs

the water, and then, with a loud scream, descends, and quickly rises again, bearing a fish in his beak. This he takes back to his perch, batters smartly against the branch, and swallows. Then he watches for another, and so keeps at work till he has eaten enough. His sight is very keen, and he finds his prey even in the turbid rapids of a waterfall. He knows, too, how to take a position which will make the best of the sunshine.

One sunny afternoon the writer was observing a Kingfisher, which sat upon a naked limb of an oak, overlooking the water. For a long time the bird saw nothing, and did not move. Presently he left his perch, and flew along the margin of the lake, rather in the direction of the sun. After going a few rods, he stopped, turned his back to the sun, and for a few seconds stood balanced on his beating wings, and looked intently into the water. Then he turned, went on a few rods further, again turned his back to the sun, repeated his careful gaze, and again went on. At the third or fourth pause,

he spied a fish, and dropped upon it like an arrow. At each pause he placed himself in the air, over the water, so that the reflections from the surface would be turned away from him.

His flight consists of five or six flaps, followed by a glide. When he pauses, he seems to stand upon his feet and beat the air with his wings, as a swimmer "treads" water.

The bird occupies the same nest year after year. Audubon tried to catch one in its burrow. He first set a net over the opening, but the bird crept out between the meshes and the earth. Next he found the bird in its hole, and he thrust a stick into the opening, thinking that he could blockade it until morning; but the Kingfisher scratched his way round the stick, and so raised the blockade.

A bird quite like the Belted Kingfisher, is the Spotted Kingfisher of Asia, *Ceryle guttata.* The natives call it *Muchee-bag*, or Fish-tiger. It is about fifteen inches long, with a beak three inches long. Its plumage is jet black,

spotted thickly with white, and its head wears a large crest of the same colors.

The Great African Kingfisher, *Ceryle maxima*, is about as long as the one last mentioned, but his body is rather larger. The back is dark ashen-gray, nearly brown, and marked with numerous small white spots. The lower surface is grayish-white.

The English Kingfisher, *Alcedo hispida*, is about seven inches long. Its coloring is quite brilliant, and complex. The top of the head, back of neck, and back, are dark green, flecked with bright spots of blue. The lower part of the back is light violet, or blue, and the tail indigo. The under parts are chestnut. Although thus brilliantly colored, it loses its gay appearance when seen against fresh white snow. This bird catches his prey quite like the Belted Kingfisher. If he can take more than he wishes to eat, he stores the remainder away, until he gets hungry. One chose a crevice made by the roots of a willow tree, and would sometimes have four or five fish in his larder

at once, some of them large enough to cook. He will sometimes pounce upon a fish too large to be swallowed, and has been choked to death by his greediness. One is said to have caught and tried to swallow a young dab-chick, which is a small bird of the duck family.

The most fatal case is related by Mr. Wood. A gentleman watching the birds, fish and insects which were playing about a stream of water, saw a strange blue object floating down the current, and splashing with great energy. On looking closer he found that a Kingfisher had caught and partially swallowed a fish too large for him to manage; while the contest was going on, a broad-nosed pike came up, and swallowed both fish and bird. The same person asserts that the Kingfisher is fond of slow, solemn music, and will linger to listen to it, but is driven away if more lively tunes are played.

If not disturbed this bird becomes quite familiar. A fisherman threw away a fish

which was too small for his purpose. A Kingfisher upon a tree near by picked up the rejected fish. Another was too small, and thrown by, which the bird also ate. Upon this quite an intimacy sprang up between the two anglers; the man made a peculiar whistle when he threw a fish, and the bird soon learned to come at the call. This friendship lasted for several years. Others have been reared from the nest, but they require a large amount of food, and soon learn that is much easier to be fed than to get their own living.

In some parts of England the country people take this bird, remove the entrails, stuff the interior with spices, and then dry him in the sun. The bird is then hung by the point of the beak to a beam in the ceiling, so that it will turn freely, and they say that it always turns its breast towards the point from which the wind blows.

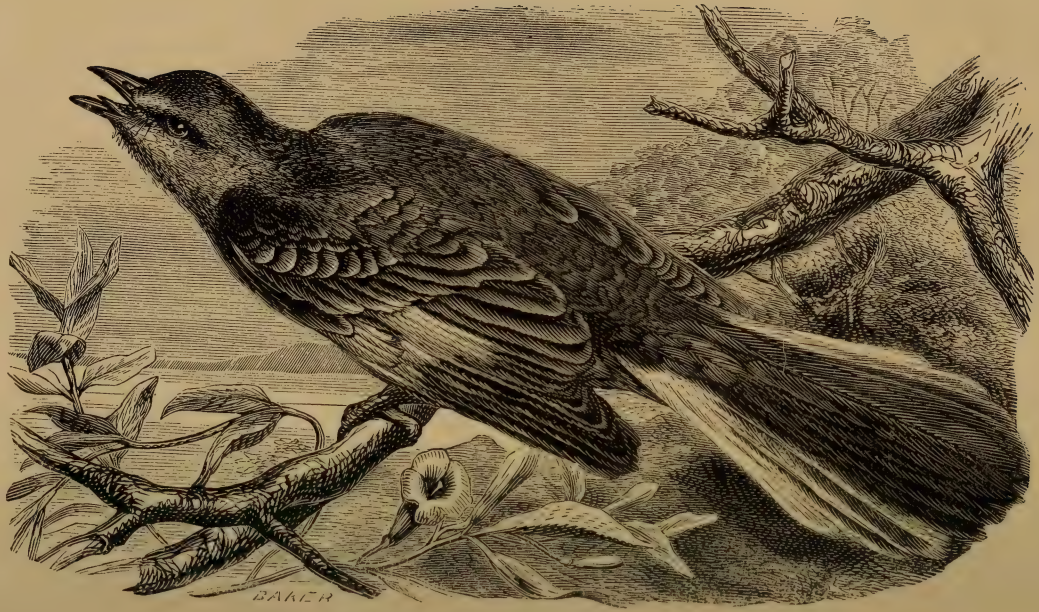
The islands of the Eastern Archipelago furnish several notable varieties of this family. Indeed, the largest species lives in Australia,

and is called the Giant Kingfisher, or Laughing Jackass, *Dacelo gigas*. The settlers give it this name from its loud, discordant cry, which is a strange, grating laugh, more startling than that of the hyena, and by no means agreeable to one who is not familiar with it, in the lonely wilderness. The Laughing Jackass has quite an inquisitive nature, and if a fire is made, it often glides silently into the thicket near by, and utters its yell from one of the branches. The stranger is alarmed, but the old hand unconcernedly shoots the intruder and cooks him for his supper.

At sunrise and sunset this bird becomes very noisy, as well as at dawn and at nightfall. So the white men sometimes call him the "Settler's Clock," while the natives call him *Gogobera*.

His food is not altogether fish, but he gobbles insects, snakes, and even small quadrupeds. He is said to be a handsome bird, the upper plumage being various shades of brown, and the under parts white, barred with brown. His length is about eighteen inches.

Another Australian Kingfisher, *Halcyon sancta*, is nearly as large as the Laughing Jackass. It feeds on insects, which it seizes in its bill, and thumps on the ground smartly; it also eats the crabs and prawns which are thrown on shore by the tide. Sometimes it tears ant-hills in pieces, and devours the inhabitants, with their young. Many other species are described, but they are not greatly different in form and habits from those we have men-mentioned.



THE MOCKING BIRD. *Mimus polyglottus.*

Of Certain Sweet Singers.

WE purpose to group together in this article several birds whose only claim of kinship lies in their song. We have already observed the general rule, that those birds which wear the gayest plumage do not usually excel in singing, while those which make the woods and meadows ring with their delicious music, are clad in gray, quiet robes. For all that, we like the homely singers best. There is something inspiriting in the rich, rollicking trill of a bird. It makes us feel that spring has come; that nature has awaked from sleep; that all the

air, the earth, the plain, the forest, the garden, the field, are full of earnest, gushing, overflowing life. As the little warbler rises in his melody, how his whole being is poured into his song! His very attitude — every feather and fibre alive, his wings spread and quivering, his eye on fire, and his full, bursting throat — tells in what downright earnest he is. And then the liquid notes, clear and sharp, or soft and mellow, how they harmonize, each with each, and, with the myriad other tones, the voiced stops of nature's grand organ, the deep diapason of the cataract and the storm, the clanging trumpet of the thunder, the viol of the babbling brook, the dulciana of the sounding pine, and even the tingling voices of the silent stars, combine to swell the choral strain which all God's works continually do chant.

Men often try to imitate the songs of birds, or to represent their strains by words, and the attempt always fails. The letters in our words represent sounds which we utter with our

mouths and throats, and which are different from those that birds make, because our vocal organs differ from theirs. Our letters will not express their tones, and if we should invent new letters for them we could not speak the words which those letters would form. Something may be done by musical notation, but the signs will only indicate the pitch, without showing the quality of tone, or giving the articulation, two of the most important items in bird-music. A person may as easily have an idea of a perfume which he has not smelled, or of a color which he has not seen, as of a bird's song which he has not heard.

Some years since, a young and wealthy Cuban, then my pupil, brought to my room a beautiful music-box, which he had just received from Paris. It was small, easily carried in the pocket, elegantly carved with flowers and fruit, and was ornamented upon the top with a gold engraved plate, about the size of a half dollar. My friend wound up the mechanism and touched the spring. A few notes of prelude,

and then a pause. The gold plate lifted itself, and a jeweled branch rose up, bearing a little bird. His shape, his attitude, were perfect; every feather was in its place. He seemed to sing, and as the tune flowed on, his tiny ivory bill opened and shut, and quivered in the trills, his head moved from side to side, his wings rose and fell, and even his feet appeared to clasp the branch closer as his body waved. In a few moments the song ended. With the last exulting note, the bird closed his wings, bowed his head, and bird and branch vanished under the closing lid. In all respects it was a piece of most exquisite workmanship, but it lacked the inimitable grace of the living bird, and its music was but the lifeless tinkle of the music-box. We peeped under the edge of the lid, and there the bird lay upon its side, curiously folded away, indeed, a dead automaton. It was a wondrous specimen of delicate mechanism, but for its value as a bird, one living, breathing, warbling thrush were worth a thousand such.

The Canary.

Tribe — *Conirostres* — Having cone-shaped bills.

The first bird which we shall mention is the Canary, *Carduelis canaria.* About three hundred years ago a ship which was bringing a large number of these birds from the Canary Isles, was wrecked on the coast of Elba, in the Mediterranean. The birds escaped, and settled themselves on shore. Some were caught by the people, and for their sprightliness and their fine singing, were much admired. They were soon carried to Italy, and from there all over Europe. The native color of the Canary is not the bright yellow which we commonly see, but a kind of dappled olive-green, black, and yellow, either color being at times the most predominant. The Germans and the Tyrolese take great pains in breeding Canaries, while societies for that purpose have existed in London for more than a hundred years. Amateurs distinguish more than thirty varieties, which are divided into two classes,

the Plain and the Variegated; the first are called Gay Spangles, and the latter Mealy Birds. The green, or mealy birds, are thought the strongest, and to have the best song. Those which are pure yellow are called Jonquils. The tendency seems to be toward a return to the darker kinds, so that a green bird is often found in the nest even when two pure gay birds are mated.

The birds are worthy of care and study for their sprightly temper, but they are chiefly valued for their loud and varied song, which is continued through most of the year. Some will even sing in the evening, if brought into the light. The melody of the song sometimes opens with that of the nightingale; others begin like the skylark, and after running through a variety of modulations, end like the nightingale. Those which have this song are esteemed most; after them the English birds, which have learned the song of the wood-lark. Some have been taught to descend the scale of the octave in a clear, silvery tone, and to introduce a trumpet-like song.

Wood describes one which learned to talk. Its parents, finding it the only one hatched out of four eggs, neglected it, and began to build a second nest above it; it was, therefore, taken out of the cage and brought up by hand. As it was constantly talked to, when about three months old, it surprised its mistress by saying, "Kissie, kissie," and by making the sound of kissing. Afterward the little bird repeated other words, as, "Kiss dear Titchie," "Sweet pretty little Titchie," (its name), "Kiss sweet Minnie," and similar phrases. It did also whistle the first bar of "God save the Queen."

In Germany the breeders of Canaries have a large house made for them, with a square space at each end, planted with trees; the birds may come out from the house through holes left for the purpose, and feed upon the seed, chickweed, and other food provided for them. The interior of the house is kept dark, and bunches of broom are placed for the birds to build in. They may easily be bred without so much expense; a large cage will answer very well.

Particular care should be taken of the caged birds, in giving them regularly clean seed, fresh water, with enough for bathing, a supply of bone to aid their digestion, and a frequent taste of some fresh, green herb, as chickweed, or lettuce. The cage should be kept scrupulously clean, and the perches should be washed often, lest their feet become sore. If the birds seem dispirited and drooping, it is often caused by minute red mites, almost too small to be seen, which infest them, prevent their sleep, and destroy their health. If a cage be brought into a strong light in the evening and a white napkin thrown over it, in a few minutes they may be seen, tiny red spots on the cloth. They may be driven from the cage by scalding with hot water, or by applying neats-foot oil to every place where the insects can find shelter. The little block of wood at the top of a round wire cage, is usually a resort for them. A kind of powder is sold, which, when rubbed into the feathers of the bird, will destroy the vermin.

The Sky-Lark.

Tribe — *Conirostres.* — Having cone-shaped bills.

The Sky-Lark, *Alauda arvensis*, is a bird much praised by all English writers. Jeremy Taylor said "it did rise and sing as if it had learned music and motion from an angel." It sings while on the wing. At first, as it springs from the ground, its notes are low and feeble, but its music swells as it rises, and long after the bird is lost to the eye it continues to charm the ear with its melody. Even then, a practiced ear will know the motion of the bird by his song. It climbs up to the sky by a flight, winding like a spiral stair, constantly growing wider. It gives a swelling song as it ascends, and a sinking one as it descends; and if it takes but one turn in the air, that whirl is either upward or downward, and varies the pitch of the song. The natural impulse to throw itself up when it sings is so great, even when confined, that it leaps against the top of the cage, and would injure itself if the roof

were not covered with green baize to receive the shock.

The nest of the Lark is concealed in some hollow in the ground large enough to hold it. Usually it is hidden by a tuft of grass or leaves, and by the quiet color of the dry grass, leaves, and hair, of which it is made. The bird does not seek the society of man, but is not much disturbed if he comes near. One sitting on her nest was passed over by the mower's scythe, which cut away all her concealment, but did not injure her. She did not fly, and a person who returned in an hour to see if she was safe, found that she had built a dome over herself with dry grass, leaving an opening for passing in and out.

A gentleman riding on horseback had a Lark drop suddenly upon the saddle before him, with wings outstretched, as if wounded to death. When he tried to lay his hands on it, it moved over the horse, and finally fell on the ground between the horse's feet. As the rider looked up, he saw a hawk ready to pounce upon the

Lark, as soon as it should leave its place of refuge. Afterwards it again mounted the saddle, and at the first opportunity flew into the hedge, and was safe.

A pair of Larks had hatched a brood of young in a grass field. The grass had to be cut before the young ones could fly, and as the mowers approached the nest, the old birds were much alarmed. Finally, the mother laid herself flat on the ground with wings outspread, and the father, by pulling and pushing, drew one of the young on her back. She flew away with that, and soon returned with another. This time the father took his turn, and thus they carried away all the young before the mowers reached the place. At another time a Lark attempted to carry away its young in its claws, but the little bird dropped from a height of about thirty feet, and was killed. They have been known to carry away their eggs, grasping them with their two feet.

In the spring and summer the Larks live in pairs, but in autumn they gather in large

flocks, and before snow falls they become very fat, when thousands are killed for market. The back of the bird is brown, blackish brown, and gray; the lower parts dingy white. It is about seven inches long, the tail being three inches. In size it is about as large as a bob-o-link.

The Nightingale.

TRIBE — *Dentirostres* — Toothed-billed.

OUR next bird is the famed Nightingale, *Luscinia philomela.* It is unknown in America, but in England and throughout Europe it is deemed the prince of singers. In the evening, after most of nature's sounds are hushed, the Nightingale begins his song, and sings, with little rest, all the night. It rarely sings by day, and those kept in cages are often covered with a cloth to make them sing. It is very shy; professed naturalists know but little of its habits. Mudie says: "I watched them very carefully for more than five years, in a place where they were very abundant, and at

the end of that time I was — about as wise as at the beginning."

The Nightingale begins to sing in England in April. Its music is loudest and most constant when it first comes, for then the males are singing in earnest rivalry to attract their mates. When the female has made her choice, her mate becomes much attached to her, and if he should be captured, pines and dies. But his song grows less, and after the eggs are hatched, it ceases altogether. The bird catchers try to secure the singers during the first week, for then by proper care they may be made to sing a long time.

The song of the Nightingale can not be described, even though one gentleman has printed nearly half a page of what he calls a literal version of it. Here is a specimen: "Spe, tiou, squa,—Quio didl li lulylie — Lu ly li le lai la, leu lo, didl io quia!" Can you hear it?

The listener is astonished to hear a volume of sound so rich and full proceed from the throat of so small a bird. Besides its strength,

its delightful variety and exquisite harmony make its music most admirable. Sometimes it dwells on a few mournful notes, which begin softly, swell to its full power, and then die away. Sometimes it gives in quick succession a series of sharp, ringing tones, which it ends with the ascending notes of a rising chord. The birds which are free do not sing after midsummer, while those which are caged will often sing until November, or even until February. The young birds need to be under the training of some older one, and will often surpass their teacher; few become first-rate.

The nest of the nightingale is not built in the branches, or in a hole, or hanging in the air, or quite on the ground, but is set very near it. It is not easily found, unless the movements of the bird betray it. The materials are straw, grass, little sticks, and dried leaves, all jumbled together with so little art, that one can hardly see it when it is right before him. If the same materials were seen any where else, they would seem to have been

blown together by the wind, and stopped just there by a fork in the branches. There are four or five smooth, olive-brown eggs. The bird is about six inches long, and weighs three quarters of an ounce. Its colors are dark brown above, and greyish white below.

Izaak Walton saith: "But the nightingale, another of my airy creatures, breathes such sweet, loud music out of her little instrumental throat, that it might make mankind to think that miracles are not ceased. He that at midnight, when the very laborer sleeps securely, should hear, as I have very often, the clear airs, the sweet descants, the natural rising and falling, the doubling and re-doubling of her voice, might well be lifted above earth, and say, Lord, what music hast thou provided for the saints in heaven, when thou affordest bad men such music on earth!"

The Mocking-Bird.

Tribe — *Dentirostres.*

Although America wants the Nightingale, the queen of English bird-song, we have an equally noted, and more wonderful singer, in the Mocking-bird, *Mimus polyglottus.* Every one who hears this bird is fascinated with its thrilling song. Within its throat every bird seems to sing, for it can reproduce all their notes, from the soft twitter of the blue bird to the rich jargon of the thrush, or the shrill scream of the eagle.

"Yes, they are all here! Hear, then, each warble, chirp, and trill. How they crowd one upon another! You can hear the soft flutter of soft wings as they come hurrying forth! Hark, that clear, rich whistle! 'Bob White, is it you?' Then the sudden scream! is it a hawk? Hey! what a gush, what a rolling, limpid gush! Ah, my dainty redbreast, at thy matins early? Mew! what, Pussy? No, the

cat-bird; hear its low, liquid love-notes linger round the roses by the garden walk! Hillo! listen to the little wren! he must nearly explode in the climax of that little agony of trills which it is rising on its very tip-toes to reach! What now? Quack, quack! Phut, phut, phut! Cock-doodle-doo! What, all the barn-yard? Squeak, squeak, squeak, pigs and all. Hark, that melancholy plaint, Whip-poor-will, how sadly it comes from out the shadowy distance! What a contrast! the red-bird's lively whistle, shrilly mounting high, higher, highest! Hark the orchard oriole's gay, delicious, roaring, run-mad, ranting riot of sweet sounds! Hear that! it is the rain-crow, croaking for a storm! Hey day! Jay, jay, jay! it is the imperial dandy blue-jay. Hear, he has a strange, round, mellow whistle, too! There goes the little yellow-throated warbler, the woodpecker's sudden call, the king-bird's woeful clatter, the the dove's low, plaintive coo, the owl's screeching cry and snapping beak, the tomtit's tiny note, the kingfisher's rattle, the crow, the

scream, the cry of love, or hate, or joy, all come rapidly, in unexpected contrasts, yet with such clear precision that each bird is expressed in its own individuality."

When the bird becomes acquainted with man, he adds a new stock to his vast store of sounds. He imitates the bark of the dog, the harsh setting of saws, the whirring buzz of the millstone, the click-clack of the hoppers, the dull, heavy blow of the mallet, the fragments of song whistled by laborers or sung by milkmaids, the creaking of wheels, the neighing of horses, the baa of the sheep, the deep low of the oxen, and all the unnumbered variety of sounds produced by men.

Besides all this, he has a song of his own. His own native notes, which are distinct from all the others, are bold and full, and very varied. They consist of short phrases, of two three, or perhaps five or six notes; often interspersed with imitations, and all uttered with great rapidity and emphasis, and continued for half an hour at a time. Indeed, many think

the imitations decidedly injure his song; for in the midst of the most inspiring strain, he will often turn aside to introduce some jarring, grating discord. While singing he spreads his wings, expands his tail, and leaps about his cage as if, in ecstasy, he would dance to his own music.

Each bird is master in his own district. When one begins to sing, the others cease, or go so far away that their voices seem but the echo of his song.

His nest is in some thick bush, and is carefully concealed. While the female is sitting, the male watches with jealous care, and will not allow hawk or snake to come near. The black snake, which seeks for its eggs and young, is often driven away by this courageous bird. Dogs are forced to run away from its sharp beak, and a cat finds the ascent of the tree under the furious thrusts which are pecking her nose and blinding her eyes, a task too great for her endurance.

The color of the mocking-bird is a dull

brown, with a decided ashy tinge. The chin, throat, and under parts are pale brown, inclined to gray. The male is known by the breadth and pure tint of the white band on the wings. His length is about nine inches.

THE TRICOLOR-CRESTED COCKATOO.

Cacatua Leadbeateri.

About Parrots.

VERTEBRATA — AVES.

ORDER — *Scansores*. — Climbers.

FAMILY — *Psittacidæ*. — Parrot-like.

BENEATH the luxuriant forests of tropical countries, where animal life of every kind develops the most singular forms, and the most brilliant colors, the large and numerous family of Parrots is very conspicuous. Its various sub-families, Parrakeets, Parrots, Lories, Macaws, and Cockatoos, are distinguished chiefly by variations in the form of beak or tail. All have large and strong beaks; the upper mandible, or jaw, is curved very

much, shutting down over the lower mandible, and is sometimes very long. The tongue is short, thick, and fleshy; its shape gives these birds their remarkable power of imitating human speech.

The first branch, the Parrakeets, or Paroquets, have small bodies and long tails. They dwell mostly in Australia, and the islands adjacent.

A beautiful example is the Rose-hill Parrakeet of New South Wales and Van Dieman's Land, *Platycercus eximius.* The head, sides of the face, back of the neck, and breast, are glowing scarlet; the chin and upper part of throat are pure white; the feathers of the back are very dark black-green, broadly edged with an exquisite hue of light green; the wing-shoulders are shining lilac, mixed with black; many of the wing-plumes have a black-green centre, with golden-yellow edges, and a bright green spot at the tip; the central tail feathers are dull green, the others lilac blue, darkest near the quills, and shading to almost white at

the tips; beneath the tail the feathers are light scarlet, and the under parts of the body are white, shading into light green.

This bird eats a great variety of seeds and insects. It is hardy, and thrives in a cage. Its voice, a rather pleasant low whistle, is not harsh like that of many other parrots. In its home, it lives in the open country in little companies; in certain localities it will be very abundant, and between them, for long distances, not one will be found.

The Ground Parrakeet, *Pezophorus formosus.* This bird has none of the gay colors of the former, yet is very pretty. Its barred plumage, dark green above, mottled with yellow and black half-moon spots, and yellow beneath, similarly spotted, with long tail feathers alternately barred with red and green,— its habits, and its strong game odor, give it a marked resemblance to the pheasant, so that the Australian colonists call it by that name. On the ground it runs very swiftly, winding its way in and out among the stiff grass stems, so

shrewdly as to baffle almost any dog. As a last resource it takes flight, but soon alights again, and hides in the tufts of grass. Its flesh has a flavor equal to snipe, and almost to quail. Its white eggs are laid on the ground.

Another elegant variety is the Ringed Parrakeet, *Palæornis torquatus*, a native of both Asia and Africa. The ancients brought this bird to Rome from Ceylon; ever since it has been a favorite cage-bird. Wood tells of one which was brought from India to London, through the kindness of an old weather-worn sailor, who took her into his berth, and warmed her in his bosom, while the others on board perished during the cold nights of the passage. Soon after her arrival, a great clattering was heard in the parlor, and Polly was found in a very talkative mood, riding about the room on the cat's back, while pussy marched on with the greatest gravity. It was her habit to sit at table on her master's shoulder; if she wanted any thing, she pecked at his ear; if the wea-

ther was chilly, she climbed up by his whiskers, and warmed her toes on his bald head.

This bird does not speak very distinctly. It is very docile. One which was taken into a school room was at first so noisy as to stop all recitation. She was soon taught silence by banishment, at every transgression, into a dark closet. It became very amusing to see her stretch out her head to speak, and then, as she remembered, suddenly check herself.

The general color of this bird is grass-green. The feathers on the head shade from green through blue to a fine purple at the nape of the neck. Just below the purple is a narrow band of rose color, and below that a streak of black, narrow at the back, and growing broader towards the front — hence the name *torquatus*, wearing a collar. The upper mandible is coral-red; the lower, blackish. Its length is fifteen to eighteen inches, and its size that of a wild pigeon.

The Macaws live mostly in South America, Their cheeks are without feathers, their tail-

feathers long, their beaks large and strong. They usually dwell in forests, where the ground is swampy. They fly high, and oftenest perch on the tops of the tallest trees. Their colors are so varied and intricate that written statements give but feeble notions of their actual splendor. Among the most noted varieties, specimens of which are often seen in menageries, are the Red and Blue, Blue and Yellow, Scarlet, and Great Green Macaws.

Waterton writes of the Red and Blue Macaw:

"Superior in size and beauty to any Parrot of South America, the Ara will force you to take your eyes from the rest of animated nature and gaze at him. His commanding strength, the flaming scarlet of his body, the lovely variety of red, yellow, blue and green in his wings, the extraordinary length of his scarlet and blue tail, seem all to join and demand for him the title of emperor of all the parrots. He is scarce in Demarara until you reach the confines of the Macoushi country; there he is in vast

abundance; he mostly feeds on trees of the palm species.

"When the coucourite trees have ripe fruit on them, they are covered with this magnificent parrot. He is not shy or wary; you may take your blow-pipe and a quiver of poisoned arrows, and kill more than you can carry back to your hut. They are very vociferous, and like the common Parrots, rise up in bodies towards sunset, and fly, two and two, to their places of rest. It is a grand sight in ornithology to see thousands of Aras flying over your head, low enough to let you have a full view of their flaming mantles. The Indians find their flesh very good, and the feathers serve for ornaments in their head dresses."

A bird which should be included among the Macaws, is the Carolina Parrot, *Conurus Carolinensis*, of North America. It dwells throughout the Southern States, and, according to Wilson, may be found along all the tributaries of the Mississippi and the Ohio, as far north as Lake Michigan. On the Atlantic coast, it rare-

ly goes farther north than Maryland. It is peculiarly fond of the burrs of the cockle, whose prickly hooks do so much mischief by clinging to and working into the fleeces of sheep; in some cases the wool is so filled with cockles that the trouble of cleaning it is more than its value. Besides these burrs, this Parrot eats beech-nuts, and the seeds of cypress trees.

At the Big Bone Lick, on the Ohio river, about thirty miles from the mouth of the Kentucky, Wilson found them in great numbers; they came to drink the salt water. On the ground they seemed to spread a carpet, gay with green, orange, and yellow; afterwards, on the boughs of a tree, which they appeared to cover entirely, they presented a most gorgeous appearance, as the sunlight was reflected from their brilliant plumage.

"Having shot one of their number, the whole flock swept round repeatedly, and again settled on a low tree within twenty yards of the spot where I stood. At each discharge, though showers of them fell, the affection of

the survivors seemed to increase; for, after a few circuits, they again alighted near me, looking down on their slaughtered companions with such manifest sympathy and concern, as entirely disarmed me. They fly very much like the wild pigeon, in close, compact bodies, and with great rapidity, making a loud and outrageous screaming, not unlike that of the red headed woodpecker. Their flight is usually circuitous, with a great variety of elegant and easy serpentine meanders, as if for pleasure."

One of those which he obtained at the Big Bone Lick he carried with him on his way to Louisiana. While he traveled by water, he kept it in a rude cage on his boat, but by land he wrapped it in a silk handkerchief, and carried it in his pocket. At meal times he unwound his prisoner and fed it; when he attempted to bind it again, a quarrel usually ensued, in which the bird, though forced to yield, often gave its master severe bites. The Indians among whom he traveled were much amused at his companion. In their language

they called it "Kelinky," but they soon learned the white man's name, Polly.

At Natchez he procured a suitable cage, and hung it on a piazza. She soon called the passing flocks; they would often alight on the neighboring trees, and hold friendly chat with the prisoner. One was caught and put in the cage. Polly was delighted with her new companion. She crept close to it, as it hung by the bars of the cage, chattering to it in a low tone, as if sympathizing with its misfortune, scratched about its head and neck with her beak, and at night nestled as close as possible, often hiding her head in its feathers. The new bird died, and Polly mourned very much. A looking-glass was placed beside her, and all her fondness seemed to return. She was completely deceived; as night came on, and often by day, she would lay her head close to the image in the glass, and doze away, perfectly satisfied. During the passage from New Orleans the bird escaped from her cage, flew overboard, and was drowned.

The general color of the Carolina Parrot is green, washed with blue; the forehead and cheeks, with spots on the head, shoulders, and wings are orange; the primary wing-feathers are purplish black; the wedge-shaped tail blue along the central line. Its entire length is about twenty-one inches.

The Lories differ from the Macaws chiefly in their weaker bills and softer plumage. They are brilliantly colored; are very active and gay, even in confinement. Their home is in the Molucca Islands, whence many are carried to Eastern Asia, to be kept as pets.

As an example, we select the Purple-capped Lory, *Lorius domicellus.* The principal color of its plumage is rich scarlet; the top of the head is deep purple, nearly black on the forehead, and passing into violet at the back of the head; the upper part of the breast has a collar of yellow; the wings are green above, changing to violet on the edges; the tail feathers are scarlet near the quills, banded near the end with black, and tipped with yellow;

the thighs are azure; the beak orange-yellow. Although the tail is short, the bird is about eleven inches long.

The true Parrots are known by their short, square tails, the absence of a crest, and the toothed edges of the upper mandible.

The Grey Parrot is one of the best known. It learns easily, and talks much and distinctly. Its home is in Africa. The sailors who bring it thence delight to teach it bad language, which it never forgets, so that in spite of the most complete training it will often startle sober people by very wicked remarks. A Parrot which talks much, occasionally inserts its sentences where they are very amusing, and sometimes very apt.

A Parrot belonging to a Portuguese gentleman who had an English wife, would talk in both Portuguese and English, but would never confuse the two. If addressed in either language, it would always reply in the same. Towards dinner time it would become much excited, and cry very loud, "Sarah, lay the

cloth — want my dinner!" Its master used to punish it for talking too loud; so when his step was heard, Polly would get down upon the bottom of its cage very humbly, and laying its head to the floor, whisper in its lowest tones, "Want my dinner! Sarah, make haste — want my dinner!"

When ships of war are lying away from a wharf, or pier, ladies who wish to go on board are often taken up by what the sailors call a whip. This is an arm chair suspended by a rope; the lady sits in the chair, and the sailors hoist away. On one occasion, when the chair was half way up the ship's side, a Parrot on board suddenly called out, "Let go!" and the men, thinking it a real order, dropped the poor lady, chair and all, into the sea.

One Parrot was accustomed to imitate the cries of a dog when run over by a wagon. First, there was the short, terrified yelp, when the dog found itself in danger; then the shriek of pain, as foot or tail was caught by the wheel, and then the *Ki-i*, *Ki-i*, *Ki-i*, dying away as the

dog turned the corner and vanished up the street. Of course the bird had not many rehearsals in learning this lesson.

A Grey Parrot, mentioned by Mr. Wood, observed that her keepers were very fond of a pair of goldfinches, which they were in the habit of visiting frequently, and feeding with crumbs and seeds. Polly thought it proper to be in the fashion, so she went to her cage and brought a beak full of sopped bread to put in the nest. Presently the eggs were hatched, and Polly was delighted, but her way of showing her pleasure was so earnest, that the parent birds were frightened away. Seeing the little ones deserted, she took them into her own charge, stayed with them by night and by day, fed them, even opening their bills and thrusting food down their throats, and brought them up. When able to hop about, four would get upon her back, and the fifth on her head, and thus laden, Polly would walk gravely up and down the lawn, or now and then fly a little way, putting all the ten little wings in a flutter.

By and by the birds were fully fledged, flew away, and came back no more. Polly was disconsolate, but presently found relief in adopting the brood of a hedge sparrow. These she got somehow upon her back, and carried away to her own cage. One of the parents had been killed, perhaps by a hawk; the other Polly managed to scrape acquaintance with. At first she talked a mixed jargon of English, swearing, and bird-talk, but the language of the birds seemed to overpower the human speech, and the two shortly understood each other perfectly well.

The color of this bird is elegant ashy grey, darker above and lighter beneath; the tail is bright scarlet; the bill black.

A beautiful little Parrot, about six inches long, of a general grass-green color, is known as Swindern's Love-Bird. A pair — a single one soon droops and dies — sit lovingly side by side, caressing and frequently feeding each other in a way that looks quite like kissing.

The Cockatoos have the short, square tails,

and strong beaks of the parrots, and some rival the great size of the macaws; Their distinctive feature is a crest of elegant feathers, which the owner can raise or depress at will. A species which in other respects is classed among the parrakeets, is called the Parrakeet Cockatoo. They are generally natives of Australia and adjacent islands, dwelling in the woods, and living on seeds and fruits. They nest in decayed trees. When taken young they are easily tamed, and become quite talkative.

The Great White or Broad-crested Cockatoo, *Cacatua cristatus*. This bird is about the size of a common fowl, and it seems much larger when, excited by fear or anger, it ruffles up its feathers. Its plumage is white, tinged with rose-color; its white crest consists of long feathers arching over its head.

The Great Sulphur-crested Cockatoo, *C. galerita*, measures more than two feet in length. Its color is white, tinged about the wing covers and the sides of the tail, with yellow. Its head wears a long, broad, pointed crest of fine sul-

phur yellow. Its bill is black. The same description answers equally well for the smaller Sulphur-crested Cockatoo, *C. sulphureus*, except that the length is only about fifteen inches.

With their strong beaks these birds easily crack nuts and extract the kernel, or break the shells of snails and periwinkles, and pick out the inhabitants. One kept in a cage was fond of biting in pieces bits of wood which it could get hold of. It would anxiously watch the removal of the thread from a cotton reel, and when the empty spool was placed outside its cage, it would come down from its perch, thrust its foot between the bars, reach this way and that until it found the toy, draw it into the cage, and bite it to bits.

Sometimes the Cockatoo shows a fondness for practical joking. A lady had shown some fear of one, caused by its strong beak. The bird discovered that she was afraid, and thought it fine sport, whenever this lady came near its perch, to ruffle up its feathers, yell, and pretend to attack her, just to hear some-

thing so much bigger than itself scream, and to see it run away.

The beautiful bird shown in the engraving is called the Tricolor-crested, or the Pink, or Leadbeater's Cockatoo, *C. Leadbeateri.* Its splendid crest is remarkable for its size, and for a power which the bird has of raising it like a fan, as in the picture, or of laying it flat upon its head. The long, pointed feathers which compose it are crimson at the base, then crossed by a broad band of sulphur-yellow, then by crimson again, and tipped with white. The neck, breast, sides, and under surface of the wing are deeply stained with crimson.

In the chapter on Kangaroos, Beasts, page 167, we described the boomerang, and the skill which the native Australians display in using it against that animal. They make it no less serviceable in hunting Cockatoos.

Capt. Grey writes: "Perhaps as fine a sight as may be seen in the whole circle of native sports is the killing Cockatoos with the kiley,

or boomerang. A native perceives a large flight of Cockatoos in a forest which encircles a lagoon; the expanse of water affords an open clear space above it, unencumbered with trees, but which raise their gigantic forms all around, more vigorous in their growth from the damp soil in which they flourish; and in their leafy summits sit a countless number of Cockatoos, screaming and flying from tree to tree, as they make their arrangements for a night's sound sleep.

"The native throws aside his cloak, so that he may have not even this slight covering to impede his motions, draws his kiley from his belt, and, with a noiseless, elastic step, approaches the lagoon, creeping from tree to tree, from bush to bush, and disturbing the birds as little as possible; their sentinels, however, take the alarm. The Cockatoos farthest from the water fly to the trees near its edge, and thus they keep concentrating their forces as the native advances; they are aware that danger is at hand, but are ignorant of its nature.

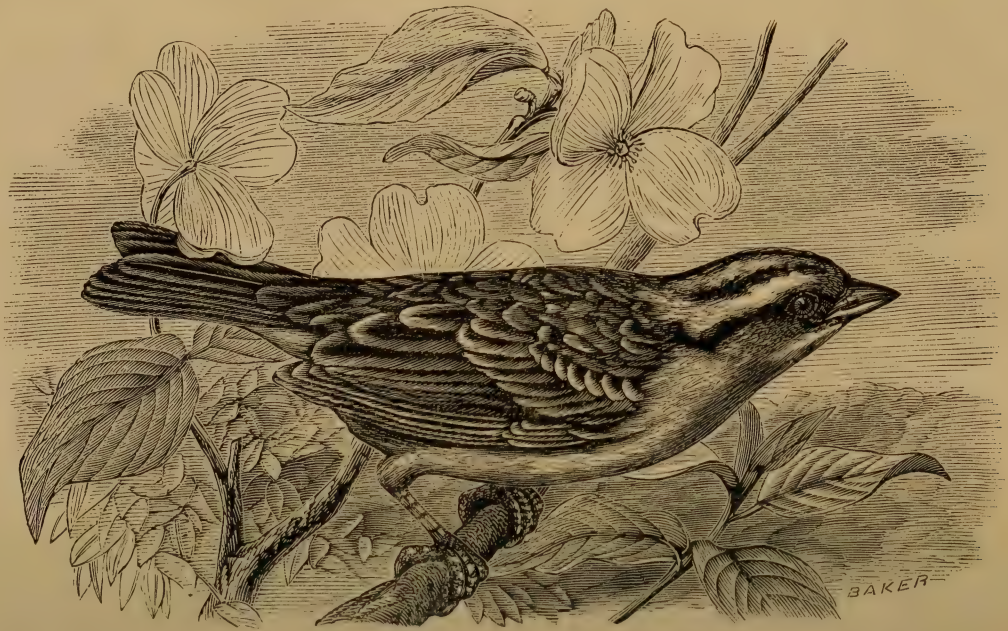
"At length, the pursuer almost reaches the edge of the water, and the scared Cockatoos, with wild cries, spring into the air; at the same instant the native raises his right hand high over his shoulder, and bounding forward with his utmost speed for a few paces, to give impetus to the blow, the kiley quits his hand as if it would strike the water, but when it has almost touched the unruffled surface of the lake, it spins upward with inconceivable velocity, and with the strangest contortions. In vain the terrified Cockatoos strive to avoid it; it sweeps wildly and uncertainly through the air, and so eccentric are its motions, that it requires but a slight stretch of the imagination to fancy it endowed with life, and with fell swoops in rapid pursuit of the devoted birds, some of whom are almost certain to be brought screaming to the earth.

"But the wily savage has not yet done with them. He avails himself of the extraordinary attachment which these birds have for one another, and fastening a wounded one to a

tree, so that its cries may induce its companions to return, he watches his opportunity, by throwing his kiley or spear, to add another bird or two to the booty he has already obtained."

All things considered, the parrot does not seem to be a desirable pet. Many, it is true, are gorgeously, or, rather, gaudily attired; they are rare, and therefore costly, and, therefore, to many, valuable. But their voices are harsh; the sentences which they learn become painfully monotonous from constant repetition; the laugh which they acquire is hollow and weird. A bird in your house which can talk, laugh, scold, and swear, does not seem to be a friend and companion, but rather an imp, a witch, familiar with evil spirits, if not actually possessed by them. Anecdotes may be multiplied concerning their queer sayings and doings, but they almost always describe some which lived long ago, or far away. A quiet man, studiously disposed, who unfortunately lives next door to a thorough-bred talker, soon

comes to wish every member of the family back in Africa, or Australia, or some equally remote land, with some Mede-and-Persian law against their leaving home. How much more lovable and lovely our native birds, whose graceful forms, beautiful plumage, and jubilant singing, enlivens our forest, prairie, and village homes!



THE WHITE-THROATED SPARROW. *Zonotrichia Albicollis.*

About Our Dickie.

YOU never heard of our Dickie? Quite likely. There had been many Dickies before, and there are many left, but none were, or are, like *Our* Dickie. When you hear his story, I am sure you will agree with me that Our Dickie was a rare little fellow. This is the story:

But first you must know where we live, and how we came to have a Dickie. Now our home is in a homely — that is, homelike — old house, that nestles in the shadow of some grand oak trees on the high shore of Lake Michigan. In winter, the winds moan among the naked, shivering branches of the gray old trees, but in

summer the sunshine peeps cheerily through their gnarled tops, and dances gaily on the green turf below, while the birds nestle in their thick foliage; the woodpeckers rattle at the dry limbs, and look out from their holes in the mossy trunks; the vireos whistle from their sprays; the blue-birds, and yellow-birds, and flame-colored orioles flash hither and thither through their branches; the robins build in their forks; the jays scream and scold about the fallen acorns; the nuthatches and the wrens creep up and down and athwart the bark, and the sparrows are every where at home. Here, if nowhere else, the birds find an asylum. The children love to greet their coming, and to watch their quaint ways. No noise of gun, no stone or arrow, ever disturbs their work.

From the rear of the garden the ground falls away fifty feet, as steep as sand and clay will stand, down to the pebbly margin of the lake; and here, in the face of the steep bank, in the tufts of sedge, and thickets of willow, in great groves of growing hemp, and clumps of thistles

and golden-rod, the birds are still at home. The bank-swallows dig holes in the earth; the kingfisher sits and watches his finny prey; the sparrows make their nests; while in the waters below the wild ducks paddle and dive, and above, the gulls spread their white and gleaming sails.

One July day, while we were searching the bank for some peculiar plants, a sparrow fluttered away from us in great apparent distress. She seemed to be hurt; as if a leg or wing, we could not tell which, was badly wounded, and so one could almost put his hand on her as she floundered away through the weeds. Almost, but never quite; pretty soon, when she had drawn us away a few rods, suddenly she was healed; she sat on a twig, bobbed this way and that, whistled a chirp or two, and then flew away as contentedly as possible.

Then we knew what a pious fraud the little actor had been playing upon us. Somewhere in that bunch of golden-rod and rank grass, she had hidden her nest, and by all this fluttering

show of broken wing she had hoped to entice us away from her darlings, to avert the great peril which threatened them. And so, having, as she thought, finished the deception, she flew away, while we went back to the bush, and found out her secret.

Her house she had builded of grass, and cushioned with hair. It was set about two feet from the ground, among the rank weeds, just where she could peep out between the leaves and twigs, and observe all who passed or approached her home. In the nest were three tiny birds — one little, one less, one least of all — with one addled egg. From this it appeared that the sparrow, like the canary, begins to sit as soon as the first egg is laid. The four eggs, laid at intervals of one or two days, are hatched in succession, and birds of several sizes are found in the same nest. Thus a week's time is saved.

The little birds were merely wads of red meat, covered with folds of wrinkled skin; they had sprawling, useless legs, and long, thin

necks, which carried each a round, bald head, with blind bunches where eyes should be, and beaks that gaped voraciously. Feathers were not; a few scattered hairs, together with the beginnings of quills at the edges of the wings, were the only clothing of these naked bodies. As we jarred the bush, the three necks thrust up three yawning mouths, waited an instant, and then sank down again; another jar brought them up again, but we had nothing to put in them, and so went away, not failing to observe the anxious mother, who had returned, and was watching us in great tribulation on a near bush.

When we were safely off, she flew to the nest, and, as I imagine, concluded that we were not very dangerous dragons, for at subsequent visits, she merely flew to the bush, without repeating the fiction of the broken wing. Two or three times next day I visited the nest and fed the little eager mouths with bits of moistened bread, which the birds seemed to swallow with intense satisfaction, while the mother

made no special demonstration of alarm. I began to think I had established a pleasant intimacy with the family.

Late the third day I visited my new friends, and then things were in sad confusion. Some stray cow had eaten away all the cover of weeds, and left the brood without shelter under the scalding rays of the sun. Worse than all, the mother was no where to be seen, and the hungry mouths screamed for food. I waited and watched, but she came no more. I concluded that she must have been killed, for I could hardly believe that she had been frightened away permanently, so I took nest and birds and carried them to the chamber where I was writing these bird-sketches for my little friends.

Here, then, was a task before me, to rear up this little deserted family. The first thing was to find suitable food; but one can hardly go astray in giving bread moistened with milk to young birds. The first thing which I observed was the utter helplessness of the little crea-

tures. They seemed to have no sense save that of feeling, or, more exactly, of motion. Their eyes were quite closed; no noise, whistle, or chirp which I made aroused them, but the slightest jar given to the nest, or to the table on which it stood, brought up the three heads in an instant, with mouths open wide, and uttering a hissing kind of squeak. It was not enough to put the crumbs of bread into their mouths. The base of the tongue has a sort of barb, like that of a fish-hook, which projects back into the throat, and a pair of similar barbs are in the roof of the mouth. If the food were not thrust so far into the throat as to be caught by these barbs, it was thrown away with a flirt. This did not seem to be because the bird did not like the food, for it swallowed it eagerly when pushed farther into its throat, unless it had taken enough; then it would throw it away.

They ate every half hour during the day, if food was given so often; if left two hours, the heads were all up and screaming. After twi-

light they were quiet until early dawn, and then there was no peace until somebody got up and fed them.

In a few days, the largest one, which we had called DICKIE, began to get his eyes open, and to look about. He soon learned the whistle which was given when he was fed, and gave an answering chirp — *tsip*, *tsip*. One day, after his allowance of crumbs, he still opened his mouth and cried, but yet threw the bread away. In doubt as to what he wanted, I dipped my finger into water which stood by, and let the drop fall into his throat. It was just the thing; the drop was eagerly swallowed, and the open beak screamed for more. Two or three drops were enough, and the bird nestled away, satisfied.

Was this want natural, or was it caused by the peculiar nature of its food? There seemed to be moisture enough in the milk with which the bread was soaked. Do the old birds bring water to their young when in the nest? This nest was near enough to water for such a purpose; and any where a supply could be had

from dew drops; but I have never seen any statement of naturalists to this point, and had always supposed such a carrying of water impossible. Certain it is, that before my birds were able to feed themselves, I gave them, once or twice a day, two or three drops of water, which they swallowed greedily, and for which they clamored, if by chance it was forgotten.

When I found small caterpillars, I fed them to my birds. They ate them gladly, but I could not spare the time to search for that kind of diet, and quite likely for this reason, the youngest died in two or three days, and the next at the end of the second week. Dickie seemed perfectly healthy; he grew rapidly, and soon was covered with feathers.

From the presence of the egg in the nest, and the sizes of the birds, I supposed that Dickie had been hatched about a week when I adopted the family, so he must have been about three weeks old when I found him sprawling on the floor, and scolding most earnestly. Thinking that he had fallen out of the

nest by chance, I put him back again, but soon found that he was no longer to be cribbed or confined in any such limited quarters. The nest was too small for his expanding ideas, and he had started to see the world. Afraid to have him loose, I put him in an old cage, but that did not suit at all; he went out between the wires without the slightest trouble. So I was forced to let him wander about the room as he pleased, and here began our more intimate and amusing acquaintance. He was not pretty as birds go; he was only little, brown, and ragged; he had no song, except his constant chirp, but he became a most entertaining companion.

When Dickie was five weeks old, he was tolerably well feathered, could perch securely, and fly about the room. He would feed himself if quite hungry, but much preferred to be fed. His favorite perch was a round of the chair in which I sat writing; to this place he would retire after a full meal, and sit for an hour, or until he was hungry again. Other places of

about equal merit were my knee or my shoulder; these he sometimes seemed to prefer, because warm to his feet, and here he would sit, his feathers raised into a puffy ball, his crest up, and himself looking about as if the world, his oyster, were already opened, and he thoroughly happy with the contents.

Wherever he was, by day or night, he always answered my call — the chirp that I used when feeding him — by his own cheerful chirp; a second or third call was sure to bring him hopping or flying to my finger. In the night, when asleep, with his head under his wing, he answered my call with a very gentle, sleepy chirrup, but without taking his beak from under the feathers. When he had been left alone, his joy at the return of a friend was without bounds. His chirp answered the first step on the stair, and when the door opened, he came flying from even the most distant corner of the room, and alighted on the hand or the head of his visitor with screams of delight.

Strangers, particularly children, he was a

little afraid of, and would retire to his master, but he soon made acquaintance. To take him up, one had only to put his finger before him, and he would instantly step on it; we used to amuse ourselves by making him walk up stairs from finger to finger.

He was much attracted by writing. He followed the pen or pencil continually from side to side of the paper, pecking at the point, and often trying to pick the letters off the paper. A pin, in a cushion, or between the leaves of a book, afforded him much diversion; he would work patiently many minutes to pull it out. Often, as he ran about over my writing, we had mock skirmishes together. The pencil would be laid gently on his toes; this he would answer by two or three sharp pats with the disturbed foot, a retreat, and then a quick return to the sport — for such he deemed it — never showing any sign of fear, or distrust.

He would allow no approach from behind; quick as a flash he would face about, and confront his pursuer. So, too, while he would at

any time mount the finger, if one tried to cover him with the open hand, just as the hand was about to close upon him, he usually stepped aside, saying by his saucy air, "no you don't."

At night, he usually retired to the open cage, and placed himself on its highest perch, under the shelter of its roof. If by accident the cage was shut, he mounted its ridge. One night, at bed time, he was not to be found. Next morning early he was clamorous for his breakfast. He had slipped out through the blind, and spent the night in an oak tree, but was glad to come back again. Usually the window and blind near my writing desk were open, and he hopped about the sill, seldom offering to go out, and always ready to return when called.

His food continued to be bread and milk, with occasionally some boiled egg; rice was acceptable, and rice pudding peculiarly so. Insects of any kind he devoured eagerly. Flies he helped himself to. A dragon-fly busied him for a long time. He broke off bit by bit,

thumped away at the head and thorax until he had broken their hard shells, and could swallow them, and rejected the wings as too husky for his stomach. Spiders were a luxury. I took him in my hand to a place in the open air where the spiders had woven their geometrical webs over a long balustrade, and even while a close prisoner, he cleared the whole railing.

In early autumn, my duties calling me to the city, I took Dickie with me. He at once made himself at home in his new quarters. During the day I left him in the cage; on my return at night, I gave him the freedom of the room. The confinement did not seem to annoy him, but his delight at companionship was evident.

It was not convenient, in our new home, to supply him with insects, and his health suffered. By day he was sprightly enough, but in the evening, as soon as he went to sleep, he fell from his perch. Then he would pick himself up in great astonishment, and immediately climb to the topmost perch in the cage, to go to sleep and fall again. I took out the higher

perches, but the low ones did not satisfy; he climbed to the top and held on the wires. Outside the cage, so long as there was a light in the room, the only place where he was content was on the top of my head; the shoulder would not do, because the head was higher.

One night, just before putting out my light, I placed Dickie on a stand within reach of the bed. When it was dark, I spoke to him and he answered; I put out my hand and touched him. Instantly he sprang from his place and fell on the floor. I spoke to him again to reassure him, and felt for him in the darkness, in order to put him back again on the stand, but the instant I touched him, with a terribly frightened scream, such as I had never before heard from him, he fled away. He would not answer my call, but when the light was brought, with a great cry he flew to my hand, overjoyed at his escape from the terrible unknown danger which had come so near him in the darkness.

Up to this time he had always taken whatever I had offered him to eat, and if, by way

of joke, I had given him a bit of stick, he simply threw it away, as if saying, "You know I can't eat that!" As advised by some writer on bird-keeping, I mixed a quantity of pepper with his food. The first morsel he took as a matter of course, but the turn of his head said, "What vile stuff is that?" The next he took, tasted, and threw away. The next he would not touch, so I had to open his beak and give his medicine by force. He did not resent it particularly, and took the drops of water I offered him kindly; but next morning, when I brought his breakfast, his manner said quite plainly, "You cheated me before, and I can't trust you now!" However, hunger was on my side; he ventured finally to try a crumb, and finding that all right, forgave the affront, and went on with his meal.

One evening, while busy, I heard him fall from his perch into his bathing dish, but as this had happened before without harm, I thought no more of it; afterward, not hearing the usual flutter which he made in shaking the

water from his feathers, I went to his cage, and found the bird dead in his bath. One could not help sorrow for so entertaining a pet, though of no more consequence than a sparrow. In manifold cerements of soft paper we laid him away, and put the vacant cage out of sight.

And now comes in the supernatural. It might, perhaps, be expected that a bird so remarkable while living should make some ghostly manifestation after so tragic a fate, yet who would suppose that the ghost of a sparrow would revisit the scene where he had chirped out his little life? As has been related, whenever any one came to the room where Dickie was alone, he made great show of gladness, chirping, and if free, flying to the head or hand of his visitor. So, after he was dead, as we opened the door, and stepped into the room, the same familiar chirp was often heard. Several persons observed it. It did not come from the door, for we oiled the hinges, and the door opened noiselessly. It was never heard when

we left the room, but only occasionally, as we entered, and usually when we were not thinking of it, or expecting it. It was no night-walking ghost; it came honestly, in broad daylight.

Alas, for our veritable ghost story! A few weeks passed, and we discovered that one board, when trod on in a peculiar place before the door, uttered a sharp creak, quite like poor dead Dickie's chirp. The precise place which made the sound was where one might step when coming into the room, but not on going out. The mystery had descended to a very commonplace fact, but I make no doubt that Dickie's ghost was as veritable an existence as any of those more pretentious goblins which have,

> "in complete steel,
> Revisited the glimpses of the moon,
> Making night hideous."

The sprightly, playful, affectionate nature of my little bird, his thorough domestication, and

trustful confidence, endeared him to us all. Such is the story of Our Dickie.

The family of Sparrows contains many species, and is abundant on both sides of the Atlantic. The English Sparrow, the only one which has found his way into general literature, is quite different from our American varieties, both in form and in habits. His shape is stouter, and his coloring, a mixture of white, brown, gray, and black, not easily described, is more varied. He gathers in large flocks, is equally at home in country or town, and alike fearless in the presence of man, or of larger birds and quadrupeds. When the Crystal Palace was built in Hyde Park, London, in 1851, the sparrows which swarmed into the enclosure through the ventilators gave very serious trouble, and were finally banished by a few sparrow hawks.

The Sparrows breed very fast, raising several broods in a single season. In a province of France they were all destroyed by order of

government; the next year even the green trees were killed by caterpillars. Besides great numbers of worms and grubs, the Sparrows eat the seeds of many noxious plants, as dandelion, and thistle. These valuable qualities are shared by most of our small birds, and all richly deserve protection. A few years since, a number of English Sparrows were imported for the Central Park in New York. They at once settled themselves in their new quarters, and have since so multiplied as to be common in all that part of the city and in adjacent towns.

Of American Sparrows, which children call "chip-birds," there are many species, which differ so little that only expert naturalists can distinguish them.

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